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WATER POWER IN NEW YORK STATE

A. Blair Knapp

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WATER POWER IN NEW YORK STATE

By
A. BLAIR KNAPP

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FOREWORD

I AM glad to write a foreword to the excellent piece of work upon "Water Power in New York State," which has been done by Mr. A. Blair Knapp of the School of Citizenship and Public Affairs at Syracuse University. This School of Public Affairs has a staff with vision. It has foreseen that the utility and power problem is already becoming of national significance and that the non-partisan and unbiased study of it is of great importance. The production of the volume on "Electrical Utilities" by certain members of the staff is an event in the development of public thought on the subject. New York is a hot point in the utility and power discussion. The contribution of Mr. Knapp upon the water power phase of the problem within the commonwealth of New York throws a bright historical light upon the controversy which has more than local interest. In New York the issue has long been definitely in the public mind and in the politics of the state. Progress in this field has been nullified by contrary opinions. In the beginning the two parties were opposite extremists upon the issue. Latterly they are proceeding in the spirit of compromise towards a better understanding and scientific inquiry. Such a piece of discussion as this of Mr. Knapp will help to lay the foundation for a more thorough and unemotional consideration of the question.

F. M. DAVENPORT,
Representative, 33rd District, New York.

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June 17, 1930 DA/HEC

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INTRODUCTION

For the past few years one of the most controversial issues in New York State has been the problem of developing water power on streams within the control of the State. More than one gubernatorial campaign has centered about it. Commissions have been appointed and investigations made while no action has resulted, although the demand for more energy is growing and an increasing amount is being imported. Because of the general interest in the power problem in New York State both from the political and the economic point of view it has seemed worthwhile to prepare a review of the various steps that have been taken to bring about definite action.

The following study not alone gives a historical review but also aims to indicate the status of control at the present time, the conflicting interests at stake and to outline the possibilities of power development through the utilization of those sources which have as yet not been made productive of electrical current.

This study is one of a series of investigations of current political and social problems prepared under the auspices of the School of Citizenship and Public Affairs of Syracuse University.

William E. Mosher, Director

CHAPTER I

GENERAL ASPECTS OF THE WATER POWER PROBLEM

"Mechanical energy is the heart of modern civilization." With such words did Governor Pinchot of Pennsylvania introduce a message to his legislature in which he attempted to stress the importance of an effective public regulation of the power industry. The truth of this statement is not to be denied. The crude mechanical inventions of the late years of the eighteenth century marked the initial stage of the revolution which overturned established systems of economics, politics, and social relations. It was the widespread adaptation of steam power to the industrial process that sounded the death knell of the handicraft system of manufacture and the simple social life attendant upon it. The age of industrialism with its complex social system, of which we are so well aware, was the result. The substitution of steam power for man power made possible many of the blessings of modern life. It is likewise in this change that we find the chief cause for the many distressing social problems with which we are so ineffectually grappling at the present time.

The pioneers of this period of mechanical invention did not foresee the full effects of their labors. Their chief concern was so to perfect their crude machines that they would be purchased by the business managers of the day, who were interested primarily in the prospects of increased profits. There seems to have been little thought as to the effects of these changes upon the lives of men and women. The revolution in industry and social life was allowed to proceed without guidance or restraint. The spirit of "laissez faire" was dominant. It seems quite evident that a wise policy of regulation and control designed to adapt the new processes to social as well as private ends might have prevented many abuses. But no far-sighted control was exercised and the industrial revolution proceeded unrestrained with an utterly ruthless disregard for social consequences.

Electricity—A New Revolutionary Force?

Now, even before we have managed to effect a social control over conditions engendered by the industrial revolution of the eighteenth century, we are faced with the prospect of other momentous changes. Electric power has already assumed a commanding position in our industrial and domestic life. Its progress from the experimental stage to its present status of proven utility has been the outstanding industrial event of recent years. And it has been a recent event, for the first electric generating station was not opened until 1882. Even by 1900 it furnished but little of the power used in manufacturing. But by 1923 the amount of industrial energy derived from electric power was greater than that produced by steam and water wheels combined.[1] In 1902 but 2½ billion kilowatt hours of electricity was generated in the United States from all sources. But by 1926 this had increased to the almost incomprehensible figure of approximately seventy-four billion kilowatt hours.[2]

[1] U. S. Department of the Interior, Water Supply Paper No. 579, p. 48.

[2] U. S. Department of the Interior, Geological Survey, 1927 Statement No. 1440, p. 1.

Not only has it replaced steam power in many industries but it furnishes illumination for the homes of over half of the people of the United States. This includes all the city dwellers, most of the people living in villages and an ever-growing number of persons on the farms in the rural areas. In the city home especially the new power is used to perform seemingly endless tasks in connection with the household from the more ordinary functions of lighting, washing and ironing the clothes to furnishing heat for the home and for cooking purposes. Street railways, subways, interurban trolleys and other varieties of urban transportation are dependent upon the new power. Longer and longer units of the transcontinental steam railways are being electrified to the end of securing faster, cleaner, cheaper transportation.

Perfection of the mechanics of electrical generation, transmission, and distribution have lowered the costs and increased the possibilities of power utilization. It is now possible to send currents of electricity of high voltage for distances ranging from two to three hundred miles. Transmission lines are being extended into remote districts to care for rural demands. Scores of new generating stations are constructed annually. Stupendous projects are either under way or at least are being planned in the hydro-electric field. Without doubt the industry is on the verge of a gigantic expansion.

The most significant features of this development will not be written in the statistics of power production, extension of transmission lines and other material aspects of the growth of the industry. Rather will they be found in the effects produced upon the lives of men and women. This consideration is clearly the vital thing. Is it possible to estimate and evaluate the influence which this new power will have upon human welfare? Clearly the developments already consummated have left their mark. We can see their influence in industry, in the home, and on the farm. With further extensions and improvements contributing to a lower cost and an increased quantity it may well be expected that the electric power will prove to be the controlling factor in a profound re-adjustment of social conditions.

It is not proposed to discuss here speculations concerning this possibility. In spite of certain obvious trends it is evident that the eventual results of an increased power supply cannot be predicted with certainty. There are those students of contemporary developments who predict without hesitation that the development of a large supply of low cost power will usher in a new civilization in which much of the drudgery, misery, and poverty of our present system will be eliminated. They venture to suggest the probability of shorter working days and weeks for those who labor without a diminution of wages and salaries. They foresee the gradual "decentralization" of industry with a corresponding decrease in the size and number of our slum and tenement districts so characteristic of an industrial system centralized in a few urban communities. From this these prophets aver will come a healthier, happier, wealthier working class and thus an almost automatic solution of many of the social problems of our urban industrial age. They paint an alluring picture, do these prophets.

Whether the vision they offer can or cannot be attained is a debatable point. Certain it is, however, that it can never be attained without a wise social control of the industry as organized and particularly a strict regulation of future developments as they occur. It is unnecessary for us to be convinced that a new civilization is possible. It is enough to note the effects which electricity has already produced. No speculation is necessary to reach an understanding that the industry occupies a most important position in the economic and social organization of our own time and place. This knowledge is sufficient to make us conscious of a need for intelligent social regulation. The possibility of more fundamental effects in the future will but serve to make us more intent upon securing such control.

There are two phases of public control of the electrical industry which are of equal importance. One of these is the regulation of the industry already established to the end that the service shall be adequate, the rates reasonable and its financial policies and administration in conformity with the public interest. The second phase includes the control of the policies of expansion and the supervision of the actual developments of the industry. Without doubt the latter phase of the problem of control is the more difficult to perform effectively. Although the problems of rate regulation and financial supervision of existing companies cannot be said to have been solved, yet public service commission regulation is an accepted fact. It is therefore possible to plot a course from the vantage point of at least twenty years' experience. In the second phase of the problem of control the benefits of a twenty-year experiment are lacking. With reference to it, there has been practically no settled policy and almost no agreement even as to first principles. Expansion and development within the industry has not been greatly influenced by any well-conceived plan or purpose on the part of public agencies. There is evidence that this condition will soon end. A public policy must emerge within a few years in accordance with which the new developments will be directed. In truth, even the absence of such a public policy definitely settled upon will in effect be a "policy" in itself and will accordingly shape ensuing events.

The control of water power development must be considered as part of this second phase of social control. Nor is it any inconsiderable part of this second problem. Several reasons for its importance will be briefly mentioned at this point.

Admittedly the power to be produced from flowing water will not constitute the bulk of the total amount of electric power that is necessary. There is a definite limit to the amount of potential water power that it may be feasible to develop. The increased efficiency of steam-generating plants is likewise a factor which may make it practicable to develop only the larger water power resources of the country.[1] Be that as it may, the problem of water power development is important and the framing of a public policy with reference to it cannot be dismissed lightly.

In the first place the potential water power of the nation is considerable.[2] It was estimated by the Geological Survey of the Department of the Interior that in 1924 there were potential water power resources amounting to 34,818,000 H.P. available 90 per cent of the time and 55,030,000 H.P. 50 per cent of the time.[3] Over thirty million horsepower available almost every day of the year is no inconsiderable amount of power at the present time running to waste. This would be

[1] A kilowatt hour of electricity could be developed from 3.2 lbs. of coal in 1919; but in 1926, 1.95 lbs. of coal was sufficient to produce the same amount of power. (U. S. Dept. of Interior, Water Supply Paper No. 579, 1928.)

[2] See Appendix B.

[3] In general only the amount available 90% of the time is considered worth developing.

sufficient to generate at least 75 billion kilowatt hours of electricity which is more than was generated by all the public utility plants in the country in 1926.[1] Since there were but 11,720,983 H.P. of developed water power resources in 1927, it is evident that the potential resource is almost three times the amount already developed. Clearly the policy for its development is of interest to the public generally.

In some states particularly the problem is of vital importance. There are commonwealths without coal supplies and at a great distance from the source of such supplies, which nevertheless possess an unusually rich heritage in flowing water. In these states the development of the larger water power resources will mean a considerable saving and in some of them the amount to be developed from flowing water would be sufficient to care for a relatively large portion of the demands for power. The states which possess unusually large water power resources are New York, Montana, Idaho, Arizona, Utah, Washington, Oregon, and California.[2] Those possessing resources considerably above the average amount include Maine, Virginia, North and South Carolina, Georgia, Tennessee, Alabama, Wyoming, and Colorado. In each of these states it is important that the policy adopted for water power development should be carefully considered.

Not all of the resources listed as belonging to the several states are controlled by them independently. For example, the undeveloped water powers of New York State were listed at 4,010,000 H.P. in 1924.[3] Of this amount 1,250,000 H.P. is to be found on the St. Lawrence River which constitutes the international boundary for a distance of 115 miles. Within 48 miles of this distance the water falls 92 feet from which can be developed 2,500,000 H.P., half of which would belong to the state of New York and half to the province of Ontario, Canada.[1]

Likewise the potentialities of the Niagara River are of interest to the province of Ontario, the Dominion of Canada, and the United States as well as to the state of New York. The Niagara is also a boundary stream. This river in many ways offers unrivalled power possibilities. The water flows at the high rate of 200,000 cubic feet per second. There is also a very high rate of fall within short distances. In the upper rapids and falls proper there is a drop of 220 feet in one mile. In the lower rapids there is an additional drop of 94 feet which makes a total fall of 314 feet in five miles. If the entire fall and flow of the river were to be utilized for power purposes it is estimated that six million horsepower could be developed. However, motivated by a desire to preserve the scenic wonder which makes Niagara Falls of world-wide fame, the United States government and the government of Great Britain agreed by treaty to allow a diversion of only 56,000 cubic feet per second. Of this 36,000 cubic feet per second may be diverted upon the Canadian side and 20,000 cubic feet per second on the American side. Until the treaty provisions are altered it will therefore be impossible to develop the possibilities of this river to the full. By utilizing the legal diversion a second time, however, at a lower point in the river it will be possible to develop 300,000 additional H.P. which will be at the disposal of the state of New York, and can be listed as undeveloped power.

So it is that at least 1,550,000 H.P. of the total amount available in New York State can be developed only with the approval of the government of the United States, Canada, and the province of Ontario. Likewise the large resource at Boulder Dam on the Colorado is owned jointly by several states and the United States is also interested because of the navigability of the river and the interstate character of the project. The Muscle Shoals project in Tennessee is also a water power resource which cannot be administered by any one state alone. Nevertheless, even such water power developments must in large measure be regulated and supervised by the state governments. The national government has been slow to act even in those cases over which it had jurisdiction. Consequently although the states do not have sole jurisdiction they are nevertheless charged in a large measure with the responsibility of initial regulation and control.

But there are tremendous resources within the boundaries of single states and therefore subject solely to state control. In New York, for example, over a million horsepower may be developed on the inland river systems of the state. Practically all of the water powers of the New England states and a large portion of the potential powers available in the other states which have been mentioned are also on inland rivers subject only to state jurisdiction.

In these cases the ownership is not usually vested in the state or the people. Usually through the operation of the common law principles of riparian rights and in some cases through legislative grants of a previous century the title to the water power sites has been acquired by individuals or private corporations. But the state still has a paramount interest and a real responsibility in their development. For in nearly every case the full development of the potential powers depends upon the construction of vast systems of storage reservoirs. Only by this means can stream flow be regulated to insure a uniform level of water through the entire year. The construction of these reservoirs cannot be accomplished without the intervention of the state government in one way or another. Usually property must be acquired by condemnation through the right of eminent domain. Owners of power sites cannot flood adjoining property unless that property shall have been acquired for that purpose. So it is that wherever ownership is lodged the governments of the several states are responsible for the enactment of a policy with regard to water power development that will protect the interests of all concerned while encouraging and assisting in the process of water power development.

Secondly, the whole problem takes on added importance when it is recognized that a problem of conservation of natural resources as well as power development is involved. The record of the American people with regard to the conservation and intelligent development of the vast public domains of coal, oil, minerals, forests, etc. is unparalleled for its utter disregard for public welfare. No one contests the claim that the public wealth in these resources was allowed to be frittered away through foolish, unthinking and at times corrupt administration. Water power represents almost the last resource which may by any stretch of the imagination be considered publicly owned. For it is true that almost all of the largest water

[1] Manufacturing plants generated a considerable amount for their own use which is not included in this figure.

[2] See Appendix B.

[3] Appendix B. Of this amount approximately 250,000 H.P. has been developed since 1924 leaving over 3½ million still available.

[1] See New York State Water Power Commission, Sixth Annual Report, 1926, Appendix No. 1, pp. 27–28.

power resources are public properties belonging either to one or several states or in some cases to the nation. Even in those cases in which ownership resides with private individuals or corporations the state must still play the part of guardian and trustee, being charged with the duty of supervising developments in the interests of wise conservation.

Thus to the plea for intelligent supervision of power development is added the insistant demand of many citizens that the water resources shall be conserved and administered in a manner most conducive to public well-being. This constitutes an added incentive for public regulation. The public in the role of policeman and social-engineer is joined by the public in the capacity of owner and trustee. It is likewise true that the development of the water power resources of the country will aid materially in the movement for the conservation of our diminishing coal reserve. Our coal supply is not unlimited and should the vision of the "giant power" industry materialize it is clear that greater and greater quantities of coal will be required for the electric power. Every kilowatt hour generated from the power of flowing water will represent a corresponding saving in coal consumption. It is estimated that in New York alone the development of the St. Lawrence and Niagara water resources will mean a saving of approximately twenty million tons of coal annually. Hence a wise policy of development of the water reserves of the country will in effect be a conservation movement working in two directions.

Thirdly there is another consideration of immediate importance. The policy to be pursued with reference to water power development has become a vital political issue. In certain sections of the country at least it is regarded as the dominant political issue. We seem to be upon the verge of enunciating a national policy. Several of our states have attempted to frame their attitude toward it in the form of legislative enactments. In other words, it seems likely that some kind of policy is going to be adopted in the near future. It therefore becomes of immediate and pressing concern that such policy should be enlightened and far-reaching. For it seems inevitable that when some policy is once adopted and is actually put into operation, it will be tremendously difficult to change that policy. It behooves us therefore to consider the matter with due care.

CHAPTER II

HISTORY OF THE WATER POWER POLICY OF THE GOVERNMENT OF THE STATE OF NEW YORK TO THE YEAR 1920

Out of such considerations grows the possible utility of a study of this kind. Its purpose is decidedly limited to the attempt to present a brief history of the "trial and error," "hit or miss" efforts to solve this problem in New York State. In New York is to be found one of the most interesting situations with regard to water power. The state has large potential resources. It has vainly struggled through its legislature for years to enunciate a clear-cut definite policy. Leaders of the two parties have made the problem a real political issue. The situation is admittedly critical. Therefore whether the New York experience is typical of other situations in its entirety or not, it is

decidedly illuminating and may well serve now as a guide to other states, and now as a warning. Certain it is, also, that the issue has become sharply drawn in this state and the decision thereon cannot help but have definite bearings upon the situation in other states.

1

The importance of the water supply to the people of the state was apparent many years before the government became concerned with the situation. One might say that the economic value of flowing water was recognized by the first settlers. For well over a century ago the rivers of the state were utilized to some extent as a source of power with which to run the many small grist mills scattered about the country. The problem of seasonal floods was also serious in some parts of the state long before the government made a move to prevent such devastations. This ordinary popular interest in the possibilities of the flowing waters of the state was very greatly enhanced by the construction of the Erie Canal. This project brought to the fore the problem of the conservation of the natural resources in water. Inspired by the necessity of securing adequate water supplies with which to feed this artery of commerce the government undertook several rather extensive surveys of one kind and another during the years of the nineteenth century. But despite these activities it was not until 1895 that official action of any moment was undertaken.

In that year a survey of the Upper Hudson river valley was ordered by the legislature.[1] This was the first of a series of laws which created various administrative agencies charged with the duty of surveying, investigating and in some cases of undertaking definite improvements. All of these laws passed, during the period between 1895 and 1907, which may be said to constitute the first period in the history of the water power policy of the state, were primarily concerned with the problems of securing pure water for the cities and of preventing devastating floods. Water as a source of electric power was but incidentally considered. This fact may be illustrated to some extent by calling attention to the titles of the various administrative commissions which were created by these laws. They included the Water Storage Commission of 1902,[2] the River Improvement Commission of 1904,[3] and the State Water Supply Commission of 1905.[4] Despite the limited scope of these investigations much valuable work was done in the way of securing data on the amount of the water resources of the state. It is also quite evident that this activity did much to focus the attention of the people upon the need for a real policy of development and control.

2

The first evidence of more than incidental interest in the power possibilities of the rivers occurred during the second period 1907–1911. In his annual message to the legislature in January, 1907, Governor Hughes vigorously stressed the importance of this potential source of power. He reminded the legislators that whereas water supply and river improvement had been objects of state interest, the question of power development had been neglected.[5] Again on June 4 of the same year in a special message

[1] New York Session Laws, 1895, Chapter 599.

[2] New York Session Laws, 1902, Chapter 406.

[3] *Ibid.*, 1904, Chapter 734.

[4] *Ibid.*, 1905, Chapter 723, and 1906, Chapter 314.

[5] Public Papers of Governor Hughes, 1907, pp. 37–38.

to the legislature he urged the enactment of legislation to provide "for inquiry and the formulation of plans with reference to the development and the use of water powers and their proper regulation and control by the state."[1]

Perhaps due to his insistence the legislature finally passed the first law which dealt primarily with power development.[2] This law, popularly known as the "Fuller Act of 1907," authorized and directed "the State Water Supply Commission to devise plans for the Progressive Development of the Water Powers of the State for the Public Use under State Ownership and Control. . . ." This law was primarily an "enabling act" to increase the scope of the authority of the State Water Supply Commission so that it might include the problem of water power as well as that of water supply. Not only was the commission to devise plans for development of each river system, but it was also to present to the legislature a bill which should embody the plans for a comprehensive development of all the water powers of the state.

Under this law the State Water Supply Commission performed a great deal of field work during the period 1907–1911. Its annual reports to the legislature, 1908–1911, are evidence enough of the painstaking and thorough manner in which it carried out the legislative mandate. It surveyed one watershed after another. The report on each watershed and each river system was replete with exhaustive engineering data upon the extent of the drainage basin, the flow of the river, the topographical, geological, and climatic features of the region, the availability of sites for power houses, storage reservoirs, etc.

[1] Public Papers of Governor Hughes, 1907, pp. 48–49.

[2] New York Session Laws, 1907, Chapter 569.

It is important to note that the energies of the commission were directed toward an understanding of the potentialities of the inland rivers. At this time the Niagara was being exploited under legislative permit and the St. Lawrence was not considered as important as it now seems to be. For this reason the comprehensive plan which the commission submitted to the legislature of 1910 dealt almost solely with the question of the ownership, construction, and control of storage reservoirs and the procedure to be followed in financing the projects, allocating the costs, and assessing the benefited property. In brief the commission advised "that the public interest plainly requires state control of water power development and a system of management which will enable the state to derive a revenue from the sale or lease of the additional water power made available by such developments, and with opportunity for a revision at suitable intervals of the terms of such lease or sale."[3] It recommended that the state proceed immediately with the construction of the necessary reservoirs; that the constitution of the state be amended to allow the flooding of the lands of the forest preserve for this purpose; that the reservoirs so constructed should ever remain the property of the state; and that a substantial revenue be derived from their operation. In the bill which was submitted to the legislature the commission outlined the procedure which should be followed with reference to the projects. This was simply that (1) a petition should be made to the Water Supply Commission seeking permission for the construction of the reservoir, (2) action should be taken by the commission upon such petition, (3) action upon the petition

[3] N. Y. State Water Supply Commission, Sixth Annual Report, 1910, p. 47.

by the commission should be reviewed by the governor, (4) in the event of favorable action and the construction of the reservoir the impounded waters should be leased, (5) all property the value of which was increased by the development should be assessed to pay for the same, (6) the whole project should be financed by state bond issues approved by popular referendum. This bill embodying these proposals received scant attention in the legislature and the second period in the history of the water power policy of the state closed without any definite developments.

Despite this failure to initiate action certain important results were obtained in this period. Perhaps the most important result was the fact that the labors of the commission brought to the attention of the public the value of the resources which were running to waste and the need for a comprehensive public policy with reference to the same. In this connection we find that the emphasis began to shift from a consideration of the resources as a source of water supply to their consideration in the light of power possibilities. No less important was the fact that definite plans and specifications were prepared for the first time which placed the whole problem on a more objective basis. As a result the general discussion and debate with reference to power development came definitely to the fore. Facts and figures were made available for the first time. It seems evident therefore that this period was one of decided progress in the understanding of the whole situation.

3

The enactment of the Conservation Commission Law in 1911 ushered in the third period in the development of the policy of the state with regard to water power.[1] Governor Dix in his annual message to the legislature of January of that year discussed at some length the necessity of having a comprehensive forward-looking program for power development.[2] He stressed the interdependence of all conservation projects and advocated the consolidation of administrative control so that water power conservation and development might be administered by the same agency which was charged with the responsibility of safeguarding the forests and other natural resources. Accordingly this law was passed abolishing the State Water Supply Commission and transferring its activities to the Bureau of Inland Waters of the newly created Conservation Commission.

The law authorized and required the new bureau to continue the investigations and surveys which were under way, to draw up "plans, specifications, and estimates," to acquire lands necessary for the development of power, and to enter into contracts for the work. It also authorized the bureau to grant privileges for the use of the surplus canal waters for power purposes. The bureau was to provide for securing revenue in the form of rentals or fees for the privileges granted or additional benefits created by the various developments. It was also required to report to the legislature on or before January 15, 1912 a bill which should consolidate all laws relative to water power and water storage.

The first group of conservation commissioners who served from 1911–1914 began at once to push the work with vigor. In their first annual report for the half year ending December 1911 they were able to set forth data more complete than any that had been previously available. They continued

[1] New York Session Laws, 1911, Chapter 647.

[2] Public Papers of Governor Dix, 1911, pp. 40–43.

the surveys and the investigations of the engineering phases of the problem. In addition they turned their attention to the economic and legal aspects of water storage and power production. As a result they were in a position to propose a plan for the development of the water power resources which was more far-reaching and comprehensive than that of their predecessors. This plan was projected in the year 1912 and is summarized in their report for that year.[1]

The essential principles of the plan can be briefly and simply stated although they were considered at the time as startling and radically progressive. The plan proposed that the state should erect storage reservoirs and power plants and should produce the power itself. In addition to that it was proposed that the state should build great trunk line transmission systems which should carry the power to all the municipalities of the state. There it should be sold at cost to municipal lighting companies which would then distribute the power to the consumers at cost.

The so-called Bayne Bill was introduced into the legislature during the year 1912 with the purpose of having this program enacted into law. The bill passed the Senate but was defeated in the Assembly.[2] Another bill embodying the same principles but applying them to a particular project [3] rather than attempting to frame a general policy was introduced early in the 1913 session of the legislature. This bill passed both houses of that body but was vetoed by Governor Sulzer on the ground that "if the state is going to develop and utilize its water powers along the lines of the measure now before me—my judgment—is that we should begin where the volume of water and horsepower is beyond question."[4]

In the years 1912–1913 political circles were much agitated by the "pros and cons" of the policy advocated by the commission. Evidently the extreme position which this group of commissioners took with reference to the problem served as a spur to the politicians, statesmen, and public utility leaders who immediately thereafter evidenced a new concern about the matter. The period was an interesting one. Public discussion was rampant. Debates were many, long, and fiery. The legislature investigated and reinvestigated. Meanwhile, the commissioners stuck to their program. In 1912 a committee of the legislature under the chairmanship of Senator Ferris of Utica, a Democrat as were the other commissioners, made a report after an extensive investigation of the whole power situation. This report enunciated the rather trite statement that the development of the power resources of the state was absolutely necessary. It expressed approval of the idea of a system of storage reservoirs, but did not endorse the plan of the commission for accomplishing this result. In general it recorded an approval of the "lease system" for state owned water powers for definite periods of time and at specific rental charges. In theory the program which it developed was similar to that which was to be adopted in 1921 and which will be described in a later chapter. The committee also went on a "junket" trip to Ontario

[1] N. Y. State Conservation Commission, Second Annual Report, 1912.

[2] The Conservation Commission was under the control of the Democratic party at this time. This party also controlled the Senate, but the Assembly was Republican.

[3] Provided for the construction of reservoirs and power houses at the Crescent Dam and Vischer Ferry on the Barge Canal system.

[4] Public Papers of Governor Sulzer, 1913, pp. 292, 296, 298.

and reported upon the success of the plan of operation in that province which was almost the same as that proposed for New York State by the Conservation Commission. In its report of this trip of investigation the committee was somewhat divided. The majority reported that the Ontario plan was a hopeless failure, while the minority reported it a huge success. The bills introduced by this committee embodying the recommendations of the majority were defeated in the legislature.[1]

Again in 1913 another committee was created by the Senate known as the Velte Committee. In its report to the 1914 legislature this committee recommended a program almost exactly opposed to that of the Ferris Committee and in substance endorsed the plan proposed by the Conservation Commission. The report stated that "a state-wide hydro-electric development by the state itself would be a long step forward in the march of events hydro-electrical."[2] It also added that "the great mass of the people have come to the realization that the state's greatest means for cheaper heat, light, and power lies in the development of its water resources by the state itself." Like the Ferris Committee the Velte Committee made a trip to Ontario. This committee, however, was unanimous in its report that the Ontario system of public ownership and operation was "highly successful." The committee recommended the passage of a bill introduced by its chairman which was an exact duplicate of the Bayne Bill defeated in the Assembly in 1912.

It was also in 1913 that the people approved in a referendum the so-called "Burd" amendment to Article VII Section VII of the Constitution of the State. This amendment stated that "not more than 3 per cent" of the lands of the forest preserve might be flooded in the interests of "public health and safety." Previous to this time the constitution had prevented the flooding of state land for any purposes whatsoever. This provision had been inserted in the constitution at the constitutional convention of 1894.

During 1914 there was little progress. The Conservation Commission was still insisting upon its progressive plan with which the legislature was not disposed to concur. In the year 1915 occurred one of those periodic political changes which completely alter the complexion of things. In the election of November 1914 the Republican party gained control of the state offices. As a result the personnel of the Conservation Commission was changed and immediately a change of policy ensued.

This shift in policy inaugurates the fourth period of our historical study of the development of a power policy which we shall summarize. In the third period just discussed no material advance was made. No developments were begun. Nor could we say that there was even the semblance of an agreement as to the proper course to pursue. A definite issue was raised however, and as a result an alignment took place which has been maintained pretty generally down to the present time. The startling nature of the plan which was proposed by the Conservation Commission also succeeded in augmenting the rapidly increasing popular interest in the problem.

4

The new Republican [3] members of

[1] Report to the legislature of the Ferris Committee, 1912.

[2] Summary of the report of the committee is given in the Fourth Annual Report of the Conservation Commission, 1914, pp. 65–73.

[3] In the course of the discussion the terms "Republican party" and "Republican policy" will occur frequently. These should be taken to

the Conservation Commission were not long in making it evident that the policy was to be changed. The Machold Storage Law which was introduced and passed in the 1915 legislature clearly indicates the new alignment.[1] This law was designed to provide the state with a definite program which should be followed with reference to the construction, operation, and maintenance of the various storage reservoirs which previous surveys had shown would be necessary to complete the development of the inland rivers.

This law provided for the creation of "river regulating districts" as public corporations with power to sue and be sued, to incur debts and liabilities, to exercise the rights of eminent domain and taxation and assessment, and to issue bonds. All these powers were granted to such "river regulating districts" for the purpose of constructing, maintaining and operating reservoirs with which to control the flow of streams. It was provided that any "watershed or integral part of any watershed" might be created into such a district. Each district was to be directed by a board of three members appointed by the governor. Each board was to be given wide power and authority with regard to construction and maintenance of the reservoirs under its jurisdiction. This included the authority to assess the benefits of storage against the benefited property, to determine the amount of the rentals to be paid to the state, and to decide upon the amount of water that should be withdrawn for power purposes. A very important feature in this law refers to the provisions for the payment of revenue to the state. The law provided that the state should annually receive 6 per cent of the value of all state lands flooded but included no share in the increased value of water and the riparian rights which would accrue to the owners of power plants and power sites.[2]

This law explicitly demonstrated the shift in policy referred to above. It will be noticed that there is no mention of state ownership of power plants or state development and transmission of power at cost as had been advocated by the commission in the period 1911–1914. The entire philosophy, if one may call it that, of this law was of private ownership, development, and transmission for profit, with the state interested only indirectly through the public corporation of "river regulating district" in the construction and operation of the reservoir alone. This concession to state control was necessary because the state or a public corporation thereof could alone legally exercise the right to flood the lands in the forest preserve.

The reports of the Conservation Commission from 1915 to 1920 are also in harmony with the new policy. In 1915 the commission recommended the leasing of water powers for fifty years with the sale of power to be regulated by the Public Service Commission. The annual report of that year states, "The policy of the state in all questions relating to water power has been and should be that capital invested as a result of state action in the further development of the water powers of the state should go in

refer to the party leaders in the legislature and to the policies enunciated by them rather than to the entire enrollment of the party in the state. It is a truism that few party members share in the determination of party policies. The same is also true of the Democratic party. The policy of the latter with regard to water power has been largely due to the influence of Governor Smith. The Republican policy has likewise been developed by a relatively few men high in the counsels of organization in the state.

[1] New York State Session Laws, 1915, Chapter 662. Summarized in the Fifth Annual Report of the Conservation Commission 1915, pp. 107–112.

[2] See pp. 60–65 for the discussion of water power development on the inland rivers.

on the basis of a liberal return to the investors, while any excess profits above that should go to the state."[1]

In 1916 and 1917 similar declarations were made. In 1918 the commission made several recommendations as to policy and set forth proposed legislation to put that policy into effect. This included the regulation of stream flow by storage reservoirs according to the Machold Law of 1915, assessment of the property benefited by the construction of the same to provide the money for meeting the costs, provision for a return to the state upon the rights and property used, construction of dams by the state on sites owned by it after which the power privileges at such sites should be leased to private companies, and the generation, transmission and distribution of electric energy solely by private or municipal companies.[2] It is interesting to note here that whereas these provisions were made for the inland rivers, the commission made a partial reservation in the case of the Niagara and St. Lawrence Rivers in that it stated in the report that "with the possible exception that upon the St. Lawrence and Niagara Rivers the state should build and equip power plants to be operated either by the state or by private companies under lease."

The commission recommended substantially the same program in 1919 and again in 1920 except that in the latter year an additional recommendation was made that the legislature pass a state power act in harmony with and along the lines of the Federal Water Power Act of that year. Thus during the fourth period which we have just been considering and which comes to a close with the passage of the New work State Water Power Act of 1921 little was done in the way of actual development of power resources. The period is characterized chiefly by the reversal of policy on the part of the new members of the Conservation Commission from that of state development and transmission to that of private development, transmission, and distribution. It is also noteworthy for the enactment of the Machold Water Storage Law which has not been materially altered up to the present time.

During this period two governors sat in the executive chair and both insisted repeatedly in their messages that the legislature must formulate a power policy applicable to the whole state which would make possible the rapid and efficient production of electrical energy from the water running to waste in the various river systems. Governor Whitman who served during the period 1915–1919 stressed the importance of power development but did little to formulate a power policy or to force the legislature to do so. Governor Smith, serving his first term 1919–1921, was considerably more vigorous. In his second annual message he openly advocated a policy of state development and transmission of power.[3]

Nevertheless it is in the fifth period, which begins with the enactment of the New York State Water Power Act in 1921 and continues up to the present time, that a power policy applicable to the entire state and to all the rivers of the state was first enacted into law. Because this law represents the first comprehensive power policy and one which is still in force and effect, we shall devote a full chapter to its consideration. It is also to be remembered that the provisions of this law are the basis of the present controversy which is now raging in the state.

[1] New York State Conservation Commission, Fifth Annual Report, 1915, p. 126.

[2] New York State Conservation Commission, Eighth Annual Report, 1918, pp. 142, 148, 149.

[3] New York State Session Laws, 1921, Chapters 499 and 579.

CHAPTER III

THE NEW YORK STATE WATER POWER ACT OF 1921

1

When Governor Miller came into office on January 1, 1921, the stage was all set for definite action upon the problem of water power development. The demands of the consumers for more electric energy had increased to a marked degree. The electric utility companies were literally combing the country for advantageous power sites which would enable them to meet this increased demand as easily as possible. Popular imagination had been stirred by the predictions which had been made in magazine articles, on the platform, and in the press with reference to the possible economic and social results of abundant electrical power.

Congress had recognized the importance of the problem in 1920 by creating a Federal Power Commission which should have the authority to regulate power developments upon territory under the jurisdiction of the national government. The legislature at Albany had been debating and discussing the problem for over thirteen years. One administrative body after another had investigated, surveyed, and contributed its share to the volume of data concerning the water power resources of the state and their efficient exploitation. Still no comprehensive plan had been enacted which would adequately take care of all the water powers of the state. This was due in part to the frequent disagreements between the two houses of the legislature or between the legislature and the governor.

In January, 1921, however, the Republican party found itself in control of both houses of the legislature while a Republican occupied the governor's chair. It was therefore so situated that it could write its power policy into law without serious opposition. It was the first time that either party had been in that strategic position since the water power problem had become of major interest. Governor Miller in his first annual message advocated immediate action on the part of the legislature. In general he recommended that the federal act of 1920 should serve as a model and that the recommendations of the conservation commission which was then in office should be followed. In other words, he called upon the legislature to frame a law in which the theory of private development under lease should be the fundamental idea. As a result of the popular interest, the pressure of the governor, the complete authority of the Republican party, and the example of the national government the Water Power Act was passed.

2

The act created a State Water Power Commission to be composed of the conservation commissioner, the state engineer and surveyor, the attorney general, the president of the senate, and the speaker of the assembly. The conservation commissioner was to be the chairman of the commission. All powers and duties with reference to water power development which had been delegated to other administrative agencies in the past were transferred to the new commission in addition to the new provisions which were contained in the act itself. Such portions of the Conservation Law as had granted similar powers to the water control commission were annulled.

The new commission was charged with the duty of making "surveys and investigations" and collecting "data concerning the developed and undeveloped water power resources of the state" together with all necessary information relative to the location and potential power of the various sites and the cost of developing them. It was given the power to hold hearings, to inspect the projects completed and not completed, to examine all books, records, and accounts of any licensee and to require any licensee to produce before it any data which were deemed essential. It was to appear for and represent the state in all conferences with the authorities of the United States, the Dominion of Canada, or the province of Ontario, and was charged with the responsibility of setting forth the "just rights of the state" with reference to the development of its water powers. Upon it was conferred sweeping authority to make all rules and regulations necessary to put into effect the provisions of the law.

In addition to the foregoing general grants of power which in the main had also been given to previous agencies, the water power commission was endowed with the authority "to issue licenses in the manner and upon such terms and conditions as are hereinafter provided, and upon such other terms and subject to such other conditions, not inconsistent with this article . . . as the commission may determine to be proper in any particular case for the protection of the interests of the state." The law states that the licenses may be issued to "any citizen, association of citizens of the United States, or to any corporation heretofore or hereafter authorized to develop, furnish, or sell power in the state, or to any municipality of the state." To such persons, corporations, or municipalities a license may be granted "authorizing the diversion and use for power and other purposes of any waters of the state in which the state has a proprietary right or interest, or the bed of which, or the real property required for the use of such waters or the right to develop water power is vested in the state." Similar diversion and use may also be authorized with reference to the "boundary waters of the state where the state has jurisdiction over the diversion or interference with the flow of the same solely or concurrently with any other jurisdiction or owner of a proprietary right." Subject to the proprietary rights of others authorization may be given for "the construction maintenance, and operation in, across, or along any such lands and waters, of such dams, reservoirs, diverting canals or races, water conduits, power houses, transmission lines, and other project works as are deemed necessary and convenient." In such terms did the legislature establish the policy of private development of water power in accordance with and upon the authority of a license to be drawn and issued by a commission which was created for this purpose.

3

The law rather definitely sets forth the procedure which shall be followed in granting the above-mentioned licenses. Each applicant for a license shall submit to the commission a formal application accompanied by such information relative to the proposed project as may be required. Such information shall include maps, plans, specifications, and estimates of costs, all of which shall be considered part of the license when issued. If and when the proposed plans and specifications receive the approval of the commission or are altered so that such approval may be received, then the commission

shall compute the annual rental charge to be levied for such license and shall inform the applicant or applicants of the amount of that charge. If the applicant or applicants accept the amount of the charge so fixed and determined and if they signify their willingness and offer evidence of their ability to perform all of the requirements of the license, to construct and maintain the proposed project and to pay the annual rental charge, the commission shall then give notice of such determination and set a time for a hearing at which it shall take action upon the application or applications for the project. In case there are two or more applicants for the license for a project the commission is required to award the license to the applicant whose plans are "most suitable for the proper development, conservation, and utilization in the public interest of the water power resources—and are most adapted to properly develop the water power site or sites covered in the application." In case it is impossible to determine which most completely fulfills these requirements, the order of preference is fixed as first to a municipality, second to a riparian owner, and third to the applicant first filing his application and plans with the commision.

The law also provides that under certain conditions "preliminary permits" may be granted "for the purpose of enabling applicants for a license—to secure the data and perform the acts" required of an applicant for a license. The purpose of this provision is to enable an applicant to maintain the priority of his application while engaged in making surveys and preparing the various maps, plans, and estimates. Such a permit cannot be granted for more than a three-year period and not more than one permit may be in force for the same project at one time. Such permits are not transferable and can be revoked by the commission at any time for cause.

4

The most fundamental features of the Power Act are concerned with the licensing arrangement. The term of the license "shall not exceed fifty years." It must include the agreement of the licensee to abide by all the provisions of the Power Act and to pay the annual rental charge. The "terms and conditions" of the license may be modified only by mutual consent of the licensee and the commission. Certain powers of revision are also reserved to the superintendent of public works in case the license shall involve any canal or canal feeder waters. The annual rental charge fixed at the time that the license is issued is to continue for the period of the license unless revised and adjusted by the commission in the manner prescribed by law. This charge is also to be considered as part of the operating expense of the project. Failure to pay the charge to the state shall be cause for immediate revocation of the license. But in this event the state must pay the licensee the amount of the enhanced value of the state property resulting from any improvements made. This payment, however, is not to exceed the amount of the reconstruction cost of the project less certain deductions in case the licensee has a profit exceeding 8 per cent of the actual and reasonable cost.

Certain requirements with reference to the development and maintenance of the project must also be included in the license. These provisions include a time limit for the construction of the project works and provide for periodic reports to the commission in which the progress of the project together with the costs thereof shall be set forth. Requirements that the license shall at all times keep the project in good repair and efficient working order are also to be included. Repairs and replacements may be ordered by the commission after investigations and hearings at which evidence of their necessity shall be set forth. The failure of the licensee to act in accordance with these provisions shall constitute cause for the revocation of the license. In case the license is revoked because the construction is not begun within the time limit, the licensee can recover no damages from the state. In case the revocation occurs after the construction has been begun, the state may elect to take title to all the works and structures erected on state land. Under such conditions payment may be made for the enhanced value of the land. The law also authorizes the use of the power of eminent domain with certain reservations.

In addition to the foregoing conditions in the license, the law requires that it shall include a provision to the effect that "upon the expiration of the license period any and all interest of the licensee in and to state property which is covered by the license, together with any and all structures and works thereon shall rest in and become the property of the state free and clear of any and all liens and encumbrances." There is a limitation to this provision, however, in that the commission may allow certain payments to the licensee on account of improvements to the property of the state. Such allowance shall not be greater than the reconstruction cost less deduction for the aggregate income over 8 per cent after expenses have been deducted.[1]

[1] "'Reconstruction cost' of a project or any part thereof means the actual and reasonable original cost to the licensee of the lands of such project or such part, less depreciation if any, plus the cost of reproducing the ways, means, and works thereon, less the depreciation of such ways, means, and works including in such costs a reasonable allowance for organization and development expenses, but excluding therefrom any allowance for the value of the license or the contract lease or franchise, or value as a going concern, or future profits in pending or existing contracts or prospective profits, revenues, dividends, or any other intangible element." (Consolidated Laws of New York State, Chapter X-A, Article 610, Section 10.)

The law also provides that "every license issued under this article for a project shall contain a provision expressly reserving to the state the right to regulate and control the use and distribution of the power generated by any licensee, and to fix reasonable rates to be charged by the licensee under all circumstances for furnishing heat, light, or power generated wholly or partly by the use of property covered in the license, and to regulate the service, capitalization, and secured debt of the licensee and the licensed project." Responsibility for this regulation is placed upon the public service commission which is to proceed upon the basis of the provisions of the public service law relative to "electrical corporations and of the manufacture, sale and distribution of electricity" which are reaffirmed in the Water Power Act.

5

These are the principal provisions of the Water Power Act of 1921. Since that date the law has been amended in some particulars. In general these amendments do not change the basic principles of the law nor fundamentally alter the power policy which it enunciates. The reorganization of the state administrative system in 1927 caused certain changes to be made in the title and personnel of the commission which is to be responsible for the administration of the Power Act. The State Departments Law provided that the water control commission, a division of the conservation commission charged with supervision of the problems of water supply and flood control, and the

water power commission, which was created in 1921 by the original Water Power Act, should both be abolished.[1] The powers and duties of both were thereby transferred to a new water power control commission to consist of the conservation commissioner, who should be the chairman of the commission, the superintendent of public works, and the attorney general. This new commission thereby became the head of the division of water power and control of the conservation department.

This law also provided that "a license issued under the provisions of such article by the water power and control commission shall not be effective until approved in writing by the governor" and "a modification of such license shall not be effective until approved by the governor in like manner." Both of these changes became effective on January 1, 1927, and are now part and parcel of the water power law of the state. There have been other minor amendments from time to time which need not be considered here. The requirement that the governor's approval must be secured is, however, of prime importance. Due to the fact that the governor now appoints the conservation commissioner and the superintendent of public works, the change in the personnel of the commission is also likely to have a pronounced effect upon policy. Both changes very materially increase the power of the governor over the development and control of the water power resources of the state.

6

The basic principle of the Water Power Act of 1921 is private development of the power resources on authorization of a commission of the state government granted through the medium of a license which shall have a maximum term of fifty years. The specific provisions of the license which are mandatory and of most importance are: fifty-year maximum term, an annual rental charge, time limits on the preliminary surveys and upon the actual construction, use of the right of eminent domain and final re-entry of the state at the expiration of the license under certain conditions. It is this power policy which the water power commission attempted to put into effect during the period 1921–1926. This attempt finally culminated in the controversy between the commissioners then in office and Governor Smith. The development of this dispute will be the subject of the next chapter.

CHAPTER IV

ADMINISTRATION OF THE WATER POWER ACT, 1921–1926

1

SINCE the Republican party in 1921 was in complete control of the departments of the state government, including the water power commission, it was generally expected that immediate and rapid progress would be made in the development of water power in accordance with the principles of the water power policy which had been enacted into law by the legislative leaders of that party. But it is apparent that the situation was as hopelessly deadlocked at that time as it ever had been since 1907. This chapter will be devoted to a narration of the events which took place during the period 1921–1926 which show the reasons for this lack of progress. If we seem to emphasize the St. Lawrence situation to the exclusion of the problems connected with the Niagara and the inland rivers, it will be due to the fact that the chief point of contention during this period was with reference to the development of the former. It must be remembered, however, that the problems on the St. Lawrence and the Niagara are very similar, and the main points of the controversy between the governor and the water power commission are equally applicable to the Niagara.

[1] New York State Session Laws, 1926, Chapter 619.

2

During the period 1921–1926 the water power commission received thirty-four applications for licenses to develop water power at various points in the state. Of these applications twenty-three were for the use of surplus canal waters; two were for rights on inland rivers; five involved the waters of the Niagara; and four the St. Lawrence.

Between 1921 and 1924 none of the applications involving the surplus canal waters were acted upon by the commission. During the years 1921–1922 the superintendent of public works did not certify to the commission that surplus waters not necessary for navigation purposes were available. Such certification was necessary before the commission could act with reference to these waters. Then in 1922 the legislature passed a law authorizing the superintendent of public works to extend the state development of the water powers of the canal waters so that the various canal structures might be supplied with electric current.[1] The law provided that any surplus current not needed for this purpose might be sold on the market. It also carried an appropriation for the construction of two state power houses at Crescent Dam and Vischer's Ferry. As a result of this law, opportunity for private exploitation of the waters of the canal was limited and the commission approved only the state projects upon which the construction was immediately begun.

In 1923–1924 the commission came under the control of the Democratic party which was on record under the leadership of Governor Smith as being opposed to the policy of private development. As a result of this attitude on the part of the commission of 1923–1924 all applicants for surplus water power rights on the canal were notified by the commission on September 25, 1924, that it would dismiss their applications in view of the policy of state development of such water powers which had been enunciated by the law of 1922, referred to above, and which was being put to practical application at Crescent Dam and Vischer's Ferry. For these several reasons, therefore, no licenses for private development of surplus canal waters were issued during the period 1921–1924.

In 1925, however, the results of the 1924 election made themselves manifest in the personnel of the commission which again came under the control of the Republican party. The "leaning" of the new commissioners was now to be toward the policy of private development. Immediately several applications for use of surplus canal waters were received and considered by the commission. In 1925–1926 four licenses were issued for projects of this nature and rental charges were fixed in each case. Thus between 1921 and 1926 only six licenses of this type were issued, two of which were for state projects.

3

One of the two applications involving the inland waters pertained to a project

[1] New York State Session Laws, 1922, Chapter 532.

upon Moose River which would necessitate the flooding of state lands in the forest preserve. Since the constitution of the state as amended by the so-called Burd Amendment of 1913 allowed only 3 per cent of the forest preserve to be flooded and then only in the interests of "public health and safety," this project was illegal.[1] It was illegal because water power development does not come within the scope of the "public health and safety" clause. In an attempt to remedy this situation the legislatures of 1922 and 1923 passed the necessary amendment to the constitution, but it was denied ratification by the people in the referendum of 1923. In view of these considerations the commission dismissed the application for the Moose River project in September, 1924. The second inland river application involved the waters of the Hudson River. No action has yet been taken upon this application.

4

Of the five applications pertaining to the Niagara River four were submitted during the first year. Three of these were for projects in the Niagara Gorge and one involved a diversion above the Falls greater than the treaty between the United States and Great Britain would allow. Action upon the latter was deferred until the treaty provisions should be altered. Hearings were held at various times during the years 1921, 1922, and 1923 for the consideration of the other applications. Applications Nos. 8 and 16 concerned the same project; namely, the utilization of the water returned to the foot of the Falls after it had once been used by the Niagara Falls Power Company. A preliminary permit was issued by the Federal Power Commission in 1922 to the Lower Niagara River Power and Water Supply Company, but the state water power commission took no definite action upon the applications until 1924. Application No. 17, which involved the waters of the lower part of the river but which was designed to utilize them in a different way, was not acted upon by the commission previous to 1924 due to the lack of sufficient data as to the feasibility of the plan.

As was mentioned above with reference to the applications for utilizing surplus water from the canal, the water power commission in 1923–1924 was under the control of the Democratic party. Acting upon their avowed support of the principle of public development, the commissioners in September, 1924, denied all the applications involving the waters of the Niagara River. But when the Republicans once more were in control in 1925, the activity with reference to these applications was renewed. In September of that year the Lower Niagara River Power and Water Supply Company, which had previously applied for the waters of the gorge through application No. 8, introduced another petition to the commission (No. 27) for the same project. In November of that same year the commission issued a preliminary permit to that company for three years which was to enable it to file complete data with the commission. The issuance of this preliminary permit is the only definite action taken looking toward the development of the waters of the Niagara River during the period 1921–1926 with the exception of the wholesale denial of applications by the Democratic commission in 1924.[2]

From 1921 to 1925 all the commissions had labored with the problem of fixing an annual rental charge which

[1] Constitution of New York State, Article 7, Section 7.

[2] For copy of preliminary permit so issued see N. Y. State Water Power Commission, Sixth Annual Report, 1926, Appendix No. 4, pp. 58–64.

the Niagara Falls Power Company should pay for the amount of the water which it was diverting in excess of 15,000 cubic feet per second. When the Niagara Falls Power Company, the Hydraulic Power Company of Niagara Falls, and the Cliff Electrical Distributing Company were consolidated in 1918 by legislative enactment, the diversion of 15,000 cubic feet per second was authorized. Since this was done by legislative enactment, there could be no rental collected for that diversion because the charter granted at that time made no provision for it. The consolidation act of 1918 expressly stated, however, that any diversion in excess of this amount should be the basis of an annual rental payment to the state. Finally after years of bickering with the company the commission was able to reach an agreement with them and in April, 1925, the whole matter was adjusted satisfactorily. The amount of excess diversion was fixed at 4,400 cubic feet per second. The annual rental charge for the same was fixed at $60,000 with a lump charge of $120,000 for a smaller amount of water which was used between 1922 and 1925. The first payment was made in 1925 and now the state is receiving a substantial revenue from this source.

5

Three of the four applications involving the waters of the St. Lawrence were presented to the commission during the first year of its existence. They were presented by the Louisville Power Corporation which sought a license for rights near Croil Island (application No. 12), the St. Lawrence Transmission Company which desired rights in the vicinity of the Long Sault (application No. 14), and the St. Lawrence River Power Company which was seeking a license to use a submerged weir at Massena (application No. 21).

The last-mentioned application was merely an attempt to secure a license to continue the use of this weir which had been built during the war without authorization of the state. The parent corporation of the applicant was the Aluminum Company of America, which was engaged in the manufacture of war materials at the time that the weir was built. The authority for its construction was granted by the United States government and the International Joint Board of Engineers. There was no opposition to the application, but there was some difficulty in reaching an agreement as to the annual rental which should be charged. During the year 1925, after nearly four years of controversy, the rental charge was fixed at $11,000 per year dated from January 1, 1922. On this basis the license was issued by the commission and accepted by the company.

The other two applications made at the same time were not disposed of quite so simply. Both applicants, the Louisville Power Corporation and the St. Lawrence Transmission Company, were owned by the Frontier Corporation. The Frontier Corporation was in turn owned and controlled by the General Electric Company, the Aluminum Company of America, and the E. I. Dupont de Nemours Company. The St. Lawrence Transmission Company, initiator of application No. 14, later changed its name to the St. Lawrence Valley Power Corporation, and will be so designated throughout this report. The applications initiated by these two companies were for different projects on the St. Lawrence River. Application No. 12, presented by the Louisville Power Corporation, involved the construction of two power houses in the vicinity of Croil Island together with the necessary dams, locks, etc. The other company initiating application No. 14 involved the

construction of two or more power houses at Barnhart Island with the necessary dams and other structures. Hearings on both applications were held during the year 1921, and on December 29 preliminary permits were issued to both. These permits allowed the applicants to maintain the priority of their applications while securing the necessary data and completing their plans. The permits in both cases provided that the applications should be completed and all maps, plans, and data filed with the commission on or before January 1, 1925. They further provided that all the work undertaken under the permit should be subject to inspection by the agents of the commission; that full and accurate vouchers should be kept for the expenses incurred by the companies in their investigations and that the same should be presented to the commission; that no construction of any kind was authorized by the permits, and that they should be considered in force only if the applicants should accept its conditions and the provisions of the Water Power Act and its amendments in accordance with which the permits were issued. On April 20, 1922, the formal acceptances of both applicants of the terms and conditions of the permits were received by the commission. The permits were then issued. No further action was taken in 1922.

In 1923 both applicants submitted additional information to the commission in regard to the projects. No further action was taken by that body, however, because of some disagreement as to the relative status of the rights of the state of New York and the United States with reference to the waters of boundary streams. Accordingly the major efforts of the commission of that year were directed to the end of securing an understanding with the Federal Power Commission upon the disputed points. On March 29, 1923, another company, the American Super-Power Corporation, submitted two applications to the commission. One involved the waters of the St. Lawrence and the other the waters of the Niagara. The applications were not formally filed pending consideration by the commission.

The year 1924 which witnessed the wholesale denial by the commission of the applications which we have already considered also saw the same fate meted out to the two applications involving the Niagara and the St. Lawrence. They were denied by the commission on the grounds that such action was in accordance with the water power policy expressed by Governor Smith in his message to the legislature, in which he opposed "the issuing of licenses to private companies for the development of water power from the waters in which the state has a right or an interest." As a further basis for this wholesale denial of applications the commission called attention to the fact that there had been introduced in both the 1923 and 1924 sessions of the legislature a bill called the Rabenold Bill, which embodied the power policy of Governor Smith. It called further attention to the fact that this bill had passed the senate upon both occasions but had been defeated in the assembly. For these reasons the commissioners considered themselves justified in cleaning the slate in the manner which they did.

The Republican commissioners who came into office in 1925 wasted no time in condemning the action of their predecessors. They went to work on the assumption that the denial of the applications on the ground of the opposition of Governor Smith was of no effect. While holding to the above mentioned assumption, the commission, nevertheless, allowed both applicants for the waters of the St. Lawrence to present new applications for these projects so that all possible protection "to their rights might be secured." These two new applications were listed as Nos. 12-a and 14-a respectively, but were considered to be of the status of the old applications initiated in 1921. February 25, 1926, was set as the date for a hearing upon these applications. Thus during 1925 the stage was re-set so that the administration of the Water Power Act might proceed from the point at which it was so completely disrupted by the action of the Democrats.

6

By this time it was evident that the commission fully intended to grant a license to one of the applicant companies for the development of water power on the St. Lawrence. Hearings, conferences, and general discussions were held one after the other. The office of the state engineer engaged in a comprehensive study of all the proposed plans so that accurate data might be available to the commission which could serve as a basis for subsequent action.

One of the first concerns of the commission in 1926 was a consideration of the status of the application of the American Super-Power Corporation which, as we have noted, had submitted two applications to the Democratic Commission in 1923. The applications at that time had not been formally received and accepted by that commission, probably on account of the fact that its members had already determined to deny all pending applications. After an extended hearing upon the question, the new commission decided that "in its consideration of the problem it would deem the application of the American Super-Power Corporation as having been filed on March 29, 1923." It was then filed as application No. 32, but having the "time-status" of its first submission to the previous commission.

On February 25, 1926, the first hearing by the new commission relative to the applications of the Louisville Power Corporation and the St. Lawrence Valley Power Corporation was held. This hearing was well attended by the representatives of various civic organizations throughout the state who were interested in presenting to the commission their attitudes concerning the power policy of the commission in general, rather than their opinions about the specific projects immediately involved at the hearing. Together with the introduction of resolutions on the part of the representatives of such organizations, testimony was taken from representatives of the applicant companies as to the financial responsibility of the Frontier Corporation, the parent company of both applicants, and as to the interest of the General Electric Company, the Aluminum Company of America, and the E. I. Dupont de Nemours Company in the development of the water powers of the state. Testimony of George T. Bishop, the president of the Frontier Corporation, was taken. As to the engineering qualifications of the applicants, Colonel Hugh L. Cooper testified at considerable length. Colonel Cooper was the consulting engineer of the company that would undertake the actual construction in the event that either one of these two applicant companies should have been granted the license. Considerable portions of his testimony were concerned with the narration of his experiences with government projects as compared with those under private management. The stenographic report of this testimony indicates that he portrayed without reservation the relative inefficiency, waste, and delay which he had always experienced with

government projects.[1] He predicted with no uncertainty that the St. Lawrence project would entail tremendous extra expense and delay if it should be undertaken by the state of New York or a corporate organization of the same.

At this time both of these applications were drawn up on the basis of a two-stage development. That is, their plans called for the construction of two dams and power houses at two different points on the river. On April 9, 1926, however, the St. Lawrence Valley Power Corporation submitted a new plan which provided for a one-stage development. This plan proposed only one dam, but that of sufficient size so that it would take advantage of the complete flow of the river. A hearing upon the technical features of this new plan was held at that time. On May 6, 1926, the American Super-Power Corporation presented its plans and estimates to the commission. The company also requested more time in which to prepare new plans which seemed more feasible as a result of further study of the features of the St. Lawrence River. This extension of time was granted and on June 3, 1926, a further hearing was held at which this applicant submitted four alternative plans for this project, complete in each case with maps and estimates.

During the summer of 1926 no further hearings were held. The members of the commission devoted this time to conferences with the officials of Ontario and the hydro-electric commission of that province. The purpose of these conferences was to bring about an agreement with the interested and responsible Canadian government and power officials as to the type of development which should be used on the St. Lawrence. All of the plans under consideration of the New York water power commission were submitted to these Canadian officials. The gist of the results of these conferences was that the Canadian officials expressed substantial agreement with the proposed plans, but that until the state of New York had designated its licensee or had decided upon what basis it desired the development to take place, no complete accord or understanding would be possible. Until some company or state agency had been empowered by the proper authority of the state of New York to undertake the actual development of this resource, the Ontario hydro-electric commission which had already been so empowered by the province would be unable to come to a final decision as to the details of the project. In addition to these activities of the commission, State Engineer and Surveyor Roy G. Finch undertook an extensive survey of the project. On June 29, 1926, he presented his report to the commission which sets forth his findings and in which he recommends certain "terms and conditions" which should be included in the license when issued.[2]

One section of the Conservation Law (a portion of which consists of the Water Power Act) requires that when the commission shall have secured sufficient data upon the project for which a license is sought by two or more applicants, it shall determine the terms and conditions which shall be included in the license, when and if issued, together with the rental charge which is to be levied upon said project. The commission is also required to set forth its conclusions in this regard in the form of a formal "determination." Then, in case one or more of the applicants indicates willingness to accept and abide by the terms and conditions so determined, including the rental fee, the commission shall set a date for a final hearing at which time a license may be issued in accordance with the provisions of the law which establish the preferences to be allowed in granting the license.[1]

[1] Report not published.

[2] N. Y. State Water Power Commission, Sixth Annual Report, Appendix No. 1, pp. 27–35.

In accordance with this provision of the law the commission on September 24, 1926, adopted a "determination."[2] This determination set forth in legal phraseology the terms and conditions which would appear in, and in fact constitute, the license if granted. This was accepted by two of the three applicant companies—namely, the American Super-Power Corporation and the St. Lawrence Valley Power Corporation. On October 15, 1926, hearings were held to establish the financial responsibilities and reliability of the two companies and to determine the relative amount of experience which they had had with reference to similar projects. The method of financing the project was at this time under consideration. Both companies were given until December 1, 1926, to furnish information on all these points and December 8 was set as the date of the final hearing. This brings our story down to the point of the intervention of Governor Smith which resulted in the withdrawal of both applications.

7

Governor Smith had always been consistently opposed to the principles of the Water Power Act of 1921. In many speeches to the public and in every message to the legislature he consistently advocated a power policy much opposed to the one embodied in this law. It was, of course, under his leadership and largely due to his influence that the commission of 1923–1924 denied all the pending applications. Thus the Republican commission in power during the years 1925–1926, working with the avowed intention of issuing a license to allow private development of the water powers of the St. Lawrence, was "flying its flag of private development" directly in opposition to the governor. By November 1, 1926, the members of the commission had come to an agreement concerning the terms and conditions of the license, had set forth a "determination" which had been accepted by two of the applicant companies, and were ready to grant the license as soon as they could determine which should receive the same. With such a situation existing, the interested observers of political events in the state were curious as to what the governor would or could do to prevent the commission from accomplishing its purpose. The situation looked hopeless from the point of view of a supporter of the Smith power policy. But on November 3, 1926, the first of a series of telegrams and letters was received by the members of the commission from the governor in which he raised a vigorous protest against the intended action of that body.[3] It was this series of telegrams and letters which was the direct cause for the withdrawal of the applications before the commission.

We must mention at this point that on January 1, 1927, the legislative enactments effecting the long-discussed reorganization in the administrative structure of the state government were to go into effect. They had been

[1] N. Y. State Conservation Law, Article 616, Sections 2 and 5.

[2] N. Y. State Water Power Commission, Sixth Annual Report, 1926, pp. 35–49.

[3] For a reproduction of this series together with the replies of the commissioners to the same see N. Y. State Water Power Commission, Sixth Annual Report, 1926, Appendices 6–10, pp. 67–76.

passed by the legislature at its 1926 session. We need not discuss the general theory of this reorganization movement, but we must mention that in accordance with it the water power commission was to be abolished and would legally go out of existence on January 1, 1927. In its stead there was created, as we have mentioned elsewhere,[1] a water power and control commission which was to head a division of that title in the conservation department. The important feature of the change was not the change in name or alteration of its position in the skeleton outline of administrative agencies; the important consideration and the one which interested both the governor and the members of the expiring water power commission was that the new commission would be composed of the conservation commissioner, the superintendent of public works and the attorney general. What made this change in composition so extremely important was that after January 1 the governor would appoint two of the three members of this new commission. The attorney general would be the only elective official on the commission and the only one not directly under the control of the governor. In this way the governor would have complete control of the commission after the first of the new year. In addition to this we must remember that the Water Power Act had been amended so as to require that the governor should sign all licenses and permits issued by the new commission before they should be considered legal and in effect. This provision was also to be effective on the first day of January, 1927. It was quite evident to all concerned that, unless a license was issued by the expiring commission before the first of January, no license would be issued at all at least for the next two years. It is not at all difficult to understand, therefore, why the commission was eager to proceed so rapidly with the act of granting the license and why the governor was equally determined to block such action at all hazards. This was the reason for the interesting verbal tilt via telegram and letter which took place in November and December, 1926, between the governor and the members of the commission.

The governor's telegram to the Hon. Alexander MacDonald, chairman of the Water Power Commission, on November 3, 1926, called upon him to use his personal influence to prevent the members of the commission from issuing the license as they contemplated doing. He based his appeal on the grounds of the impending change in personnel, organization, and procedure which we have discussed above. On December 2, almost one month later and but six days before the date set for the final hearing on the applications, the commissioners, Chairman MacDonald excepted, sent a reply in the form of a detailed letter.[2] This reply to the governor's request for delay was in general a categorical denial that he had shown any reason for such action. The letter began with a review of power legislation in the state and the activities of the several water power commissions during the years 1921–1926 which we have already set forth in this chapter. The commissioners pointed out that such activities had been undertaken under the provisions of the Water Power Act of 1921 which they emphasized was the first and only power policy which had been enacted into law. They suggested to the governor that his objection to their intention of issuing a license was based on a question of policy and not one of administration; that the power policy of

[1] *Ibid.*, p. 31.

[2] Letter signed by Commissioners Finch, Ottinger, Knight, and McGinnies.

the state as outlined in the statute would still be in full force after the first of the year despite the change in the organization of the administrative machinery to put that policy into effect; that the legislature was in substantial harmony with reference to its support of this power policy; and that although the members of the new commission might have different ideas, they would still be under obligation to administer the power policy as sanctioned by the legislature. They reminded him that he had sought in vain to have the legislature alter that policy and that there was little if any possibility that the new legislature of 1927 would alter it in the slightest degree, and certainly not to the extent of changing the fundamental policy of private development under lease. In view of these facts and considerations the commissioners expressed to the governor their sincere belief that they were justified in refusing to alter their plans because of his opposition.

In conclusion of the rather lengthy communication the commissioners listed what they termed "special and peculiar reasons why further delay would be disastrous to the best interests of the people of the state." These "special and peculiar" reasons included the statements that the industries of the state were being hampered by the lack of sufficient low-cost power and that an industrial expansion of a billion dollars was being delayed; that the St. Lawrence could be developed only with the coöperation of Ontario and that this province had stated through its officials its immediate need of additional power; that if there was to be a delay Ontario would secure this needed power elsewhere and would then not be willing to coöperate at a later date in the development of the St. Lawrence; and that unless the state should act immediately, the development of the St. Lawrence would be undertaken as a navigation project by the federal government in which case the power development would be incidental, saddled with the expense of the whole project, and controlled by the federal authorities. As a parting concession to the governor, the commissioners stated that although there was no possibility that the 1927 legislature would repeal the Water Power Act, and while proceeding to grant the license on December 8, they would insert in it a provision that in the event the 1927 legislature should change its power policy, the license so issued would automatically become null and void.

On the next day, December 3, the governor replied to the letter. He again stressed the relation of the administrative reorganization to the administration of the Water Power Act. He stated that the purpose of the reorganization and especially of the amendment to the Power Act calling for the formal approval of the governor to all licenses was to place "the responsibility for important administrative duties where they belong"; namely, upon the governor. He claimed that these changes proposed by the Hughes Commission and enacted into law in 1926 were in spirit and purpose operative as soon as enacted although not legally in force until the first of January, and that to proceed with the attempt to license a project on the St. Lawrence would be in direct violation of that spirit and purpose. He refused to concede their avowed "special and peculiar reasons" for haste, noting that the federal and Canadian engineers were not in agreement as to how this river should be developed for "Great Lakes to the sea" navigation. He stated that a long period of time would elapse before that development would take place and that there was no dan-

ger that the rights of the state of New York over the power resources of that river would be usurped by the federal government. In conclusion he wrote, "I ask you again as governor and as governor-elect to refrain from any further action on this proposed lease in the few days left before you go out of office."

The governor followed two days later with another letter addressed to each member of the commission. This was in the nature of a formal notice to them that he had retained Samuel Untermeyer as special counsel, to advise him and "to take such action in the courts as may be deemed necessary for the protection of the interests of the state." He requested that if the commission was still intent upon granting the license they would delay that action until December 18, during which time his special counsel might complete his investigation of the situation and prepare the necessary papers to seek an injunction in the courts to prevent such action. He informed the commissioners that copies of this letter were being sent to the American Super-Power Corporation and the Frontier Corporation, "who are hereby put upon notice and will act at their peril." Finally upon December 8 he addressed a final letter to the commissioners, indicating to them that Mr. Untermeyer had informed him that the proposed license was illegal and that "on the face it appears to be an option" which the commission did not have the authority to grant. With such a state of affairs he renewed his request that action be deferred.

The upshot of this verbal combat was that the two applicants immediately withdrew their acceptances of the "determination." The American Super-Power Corporation based its withdrawal on the grounds that none of the plans had received the approval of the federal authorities and even that the New York commission itself had not determined upon final plans. The Frontier Corporation, through its president, withdrew the acceptance of its St. Lawrence Valley Power Corporation on the grounds that "political difficulties and the governor's threat of litigation" constituted an extra burden which complicated the problem and that "the benefits from the grant are too slight at best to warrant us in assuming these extra burdens." [1] Thus ended the first real engagement between the governor and the commission. Thus the governor was able to prevent the commission from granting the proposed license for the private development of the St. Lawrence and to secure the postponement of such action for the period of his term of office.

8

But what plan did Governor Smith have to offer? That is a natural and inevitable question which one should answer after disclosing the persistence with which he combatted the program of the water power commission which sought to put into effect the provisions of the power policy expressed in the Power Act of 1921. The average American professes a dislike for a destructive critic and the governor was too wise in the ways of practical politics and also too completely a student of the problems of the state to be caught napping in this regard. He had a plan which he had proposed and supported continuously since 1924. In the next chapter, therefore, we shall briefly consider the governor's plan for a power authority.

[1] N. Y. State Water Power Commission, Sixth Annual Report, 1926, Appendix No. 6.

CHAPTER V

THE STATE WATER POWER AUTHORITY

1

During the entire period of his activity in public life, both as a member of the assembly and as the chief executive, Governor Smith has championed the cause of the state development of the water power resources which it owns or in which it has definite rights. As a member of the assembly and as the Democratic leader of that body he supported through his vote and his influence the plan for the development of water power which had been proposed by the conservation commission of 1911–1914. It will be recalled that this plan proposed that all dams, power houses, transmission lines, and all other works that were necessary for the development of the water powers of the state should be constructed and operated by the government of the state. The plan in effect provided for a state power industry in which transmission and sale to municipalities as well as the generation of the electricity should be the business of the state. Mr. Smith, who was at that time an assemblyman, wholeheartedly approved this sweeping change of program and brought to bear all of his power in the legislature in a vain attempt to secure its adoption. Although this plan did not receive legislative sanction, and despite the fact that the personnel of the conservation commission was changed in 1915 so that Republican policies were recommended to the legislature by that agency, still Mr. Smith remained stubbornly opposed to any plan other than state development.

When he became governor for the first time on January 1, 1919, he proceeded at once to urge the legislature to provide for such type of development. In his first annual message to that body he reiterated his belief that if the people of the state were to receive the benefit from these resources, it would be necessary for the state to retain complete ownership and control over them and to pursue the development through the medium of a state agency. This same recommendation of policy and this same insistence that the situation demanded government ownership and operation have characterized every speech that he has made on the subject.

In a special message to the legislature in 1923, we find him asking that body to authorize the state engineer to begin developmental operations on the St. Lawrence and Niagara Rivers.[1] In the same message he asked the legislative body to repeal the provisions of the laws of 1921 and 1922 which provide for private development under lease and to substitute for them a policy of state development. This request was ignored by the legislature.

In his annual message of January, 1924, we find him proposing for the first time the creation of a power authority as an agency of the state which should be charged with the task of the development of these resources.[2] Previous to this time his program had called for this development by some ordinary agency of the government. From 1924 to the time of his retirement from office every annual message to the legislature had insisted that the power authority should be created and

[1] Governor Alfred E. Smith, *Message to the Legislature*, 1924, Legislative Document No. 3, 1924, pp. 13–15.

[2] Governor Alfred E. Smith, *Message to the Legislature Relative to Water Power Development*, Legislative Document No. 76, 1923, pp. 3–4.

the policy of private development should be repealed. The same program had been the subject of several special messages to that body. All such requests of the governor were accorded little support in the legislative body.

Nevertheless, he never wavered from his position on the problem during all the years in which he held public office. As assemblyman and as governor he stood for this policy of state development. Since 1924 his policy specifically included the creation of a power authority modelled after the Port of New York Authority. At times one hears the statement that the governor insisted upon his policy in opposition to the Republicans merely for the sake of partisanship. Anyone who has studied his record on the question, however, must realize that such a charge or such an implication is groundless. The governor may have been wrong. The opposition leaders contended that he was wrong. On the evidence of his consistency in the matter, however, one must come to the conclusion that if he was in error, he was sincerely and honestly so.

2

The reason for the governor's stand as expressed by himself is that "the water powers of this state are the property of all the people, and that when developed the people should be the beneficiaries." He added that "if the people themselves are to get the full benefit of the development of their water power resources it will have to be done in conformity with the ideas (of the people who believe) in ownership, development, and operation by the state." He based this statement on the observation that "in every spot in this state where, by our past policy, we have permitted private development, nobody has been benefited but the individuals who were lucky enough to secure the rights." There are other arguments which the supporters of the idea of the power authority have advanced to support their views. They cannot be considered here. Suffice it to say that the governor's policy grew out of the belief on his part that the above conditions and observations were sound. Consequently he opposed the extension of private development and proposed the idea of the power authority which we shall now consider.

3

The essential details of the plan for a power authority are exceedingly simple and can be outlined briefly. A complete understanding of them can be secured by examining the provisions of the Bloch bill which was the power authority bill introduced in the 1927 legislature by the Democratic leader of the assembly.[1]

The central provision of the plan was that the legislature should create "as the corporate instrumentality of the state, a body corporate and politic, perpetual in duration, capable of owning property, borrowing money and making contracts, to be known as the New York State Power Authority." The idea was that to this "body corporate and politic" should be given by legislative grant the title of all the natural resources in flowing water to which the state had claim or in which it had definite rights at the time. This agency as an instrumentality of the state was to develop such resources in the interests of the people of the state. The power authority was to be composed of three commissioners appointed by the governor "by and with the advice and consent of the senate." These commissioners were to be selected originally for "staggered"

[1] Assembly bill No. 381.

terms. That is to say that they should be appointed for terms of seven years, five years, and three years, respectively. When the term of each commissioner expired, however, the successors were to be named for five years which was to be the legal term of office for this position. These commissioners were to be paid no salary, but were to be furnished with adequate expense allowances. The chairman and vice-chairman were to be selected by the three commissioners from their own number. They were also to have the privilege of selecting a secretary and other permanent administrative subordinates who should be necessary to secure a sound organization. The commissioners were to be specifically authorized to secure the services of engineering and financial experts whenever they should be needed.

The power authority was to have the rights and privileges of a body corporate and politic. That is to say, in the first place, it was to be a corporation with all the rights, powers, and duties of such. In the second place it was to be a definite instrumentality of the state created to perform a public function. As such it would be given some of the powers and privileges adhering to state agencies. Specifically it was to be given the power "to build, operate, and maintain dams, power houses, and transmission lines and to acquire land for such purpose by purchase or condemnation." To enable it to perform its specific function completely the authority was also to be given the power to "sell water and/or electric power . . . and to contract for the sale of power" which would be generated by the structures which it was to be authorized to build and operate on the rivers and other waters to which it was to be given title by the legislature.

The general grants of power which were to supplement the ones alluded to above, included the usual corporate rights "to own, hold, and/or lease real or personal property, to borrow money and to secure the same by bonds or liens secured by the revenue from any property held or to be held by it." To this group of rights was to be added that of a body politic to condemn land needed by the authority for the efficient development of the water powers of the state. Also of this nature was the provision that as a body politic the power authority should not be taxed for the bonds or securities which it might issue nor the property which it might own. These were the general powers which it was intended that the agency should have if created by the legislature in accordance with the recommendations of the governor.

There were two limiting provisions which were included, however, for the purpose of better insuring the public interest. In the first place it was to be specifically provided "that all property so held by the power authority including the natural resources of the state, should remain forever inalienable as the property of the state." Secondly, it was to be reserved "that said power authority shall not at any time pledge the credit of the state, nor shall any of its obligations be deemed obligations of the state unless the same be so made by express act of the legislature."

Here in skeleton outline we have the power authority which was proposed by Governor Smith and sanctioned by his party. Rather than to allow private corporations to develop the water power resources of the state, he proposed that a state agency should be created in the form of a "body corporate and politic" with the rights and powers which we have outlined above. He proposed that to such an agency should be transferred the

title to all the water powers belonging to the state and upon it he would have placed the responsibility for the development of the same in the interests of the public. He proposed that this agency should finance the projects without the aid of the credit of the state. He expressed confidence in the idea that this body would be able to market its bonds and securities secured by the property which it would hold and also by the profits which would accrue to it upon the completion of the developments and the generation and sale of the electricity. In this manner the large sum of money necessary to consummate the project would be raised. He prophesied that the power authority would have no trouble finding purchasers for its security offerings and what is more, at a low rate of interest.

Governor Smith did not propose that this agency should sell the electricity direct to the municipal distributing companies as was urged by the old conservation commissioners, but rather that it should merely construct the projects, install the necessary machinery, and generate the electric energy which it should sell at wholesale to private transmission companies. These companies would carry the electricity throughout the state, marketing it to the local distributing companies which were already doing business. According to this plan the wholesale marketing of the electrical energy would be handled by means of long-term contracts. These contracts would not only fix the wholesale price of the electricity, but would also rigidly provide for the price at which it should be sold to the ultimate consumer. In other words, the amount of profit which the private transmission and distributing companies would be allowed to make would be provided for in the contract.

The theory of the above type of arrangement is known as regulation through the "contract power" of the state as distinguished from the usual type of regulation under the "police power." The latter is the type of regulation that is afforded under public service regulations. The governor contended that regulation under the "contract power" was one of the most important features of his whole plan. He called attention to the fact that the theory of valuation of public utility companies for purposes of rate-making had become enormously involved and complicated within recent years. Under the police power and through public service regulation the companies engaged in public utility business had been allowed to earn a fair profit not only upon the amount of their real investment but also upon certain intangible considerations such as going value and reconstruction cost. This tended to raise the price of public utility services to the ultimate consumer. One of the features of the plan for the power authority was, therefore, an attempt to substitute another type of regulation which will effectively exclude the consideration of good will, reconstruction costs, and going value as factors in the determination of the value of the investment upon which the public utility should be entitled to a fair return.

Therefore Governor Smith provided a plan for state ownership, development, and operation of the water power resources and structures necessary to generate electricity on the one hand, with private transmission, distribution and sale of this electricity, subject to state regulation through the contract power on the other hand.

CHAPTER VI

THE PRESENT SITUATION

1

SINCE the governor was successful in his attempt to block the progress of the opposition power policy, there were subsequently several skirmishes but no major engagements between himself and the Republican legislators on the matter of water power development. During the 1927 and 1928 sessions of the legislature verbal "brickbats" were hurled from both sides, but neither seemed to have been able to penetrate the breastworks of the other.

On January 10, 1927, a bill was introduced for the purpose of providing for the creation of "a temporary commission to study and investigate the water power situation in the state with particular reference to ascertaining the proper manner for the development and utilization of the water power resources of the State."[1] This bill never came out of committee. It was introduced for the purpose of providing a definite proposal which should serve as a basis for discussion and criticism in the legislature, the majority party of which was engaged in the task of attempting to frame some legislation which might break the deadlock.

On January 24, 1927, Assemblyman Bloch introduced a bill which sought to create a New York state power authority in accordance with the policy of Governor Smith.[2] This bill was designed to accomplish several things. In the first place it created the power authority and outlined the powers and duties of that agency. It directed that body to investigate thoroughly the whole water power situation and to confer and advise with expert engineers and bankers upon the problem. After such investigation the authority was to present to the 1928 legislature a comprehensive plan for the development and utilization of the water power resources of the state—a plan complete in all details regarding the construction and operation of the power houses, dams and other structures, together with complete data upon the method of financing the projects and controlling the sale of the resultant power to the transmission companies and to the consumer. The bill also vested the title to all state water power resources in the power authority and expressly repealed the provisions of the laws of 1921 and 1922 which embodied the water power policy of the Republican party. Naturally this bill was not allowed to see the light of day in a legislature controlled by the Republican party.

On March 11, 1927, Senator Hewitt in the senate and Assemblyman Sargent in the lower house introduced identical bills which sought the creation of an investigating commission.[3] These bills represent the product of the discussion and criticism on the part of the Republican members of the legislature of the previous bill introduced by Mr. Sargent.[4] The commission which was to be established by this bill was to be charged with the duty of investigating all the proposed plans or any other plan that might be proposed in the future and to report to the 1928 legislature its conclusions as to the plan most adapted "to conserve the public interest, accomplish the efficient and complete development of such resources and preserve to the people of

[1] Assembly bill No. 79, 1927.
[2] Assembly bill No. 381, 1927.
[3] Assembly bill No. 2100, 1927.
[4] Assembly bill No. 79, 1927.

the state inalienable its water power resources." This bill represented quite an improvement over the other one introduced by Mr. Sargent. Particularly was this true of the method of selecting the personnel of the commission. The new bill proposed that this commission should be composed of five members of whom two should be selected by the governor, two by the legislative leaders, and the fifth to be chosen by the four already selected. This bill passed both houses of the legislature but was vetoed by the governor on the grounds that the creation of a mere investigating commission was a waste of time.

On March 14, 1927, another bill was introduced by Assemblyman Bloch designed to create the water power authority to endow it with powers of investigation and to charge it with the duty of bringing to the legislature a complete plan of development.[1] This new bill would therefore seem to be almost a duplicate of the one previously presented by the Democratic leader. It differed from the previous one, however, in that it did not seek to vest the title to the water power resources in the power authority and did not seek to repeal the provisions of the Water Power Act of 1921. In other words two of the most odious provisions (from a Republican standpoint) of the previous bill were removed. The new bill still created the power authority, however, and as in the previous case charged it with the responsibility of proving to the legislature that the governor's plan could be efficiently employed in the development of the power resources of the state. As was to be expected, the legislature failed to pass this bill.

On the same day that the above bill was introduced its author presented another which sought legislative authorization for a referendum on the whole question.[2] The legislature refused to pass the bill. This action was defended in a statement which read to the effect that the problem was too complicated and involved to lend itself to popular decision.

[1] Assembly bill No. 2121, 1927.

2

The introduction of these bills and the action taken upon them which we have just described constituted the only overt action taken by either side during the 1927 session of the legislature. In the 1928 session, somewhat the same form of activity occurred. A Democratic proposal was submitted patterned after the bills which were introduced by Mr. Bloch in the 1927 session and designed for the same end. The 1928 bill was, however, quite an improvement in many respects over the previous ones. In it the Democrats met one objection of the Republicans, by providing that the power authority should investigate the feasibility of all plans that had been proposed as well as that of the governor. But, needless to say, this new bill was not passed by the legislature.

Likewise, Mr. Sargent early in the session submitted a bill which in general provided for the same type of investigating commission, with the same powers and duties as that which had been proposed in the bill introduced and passed in the 1927 session and vetoed by the governor.[3] This bill was passed by the legislature and vetoed by the governor in the same manner as the one previously passed.

Thus at the close of the 1928 session of the legislature no progress had been made in breaking the deadlock which had developed in 1926. There was plenty of debate and discussion from both factions which accompanied the

[2] Assembly bill No. 2122, 1927.

[3] Assembly bill No. 1668, 1928.

introduction of and action upon these bills, but it was all futile and unsuccessful. The governor was in complete control of the water power and control commission which accordingly took no action upon petitions for licenses to develop the water powers of the state that were presented by private corporations. The Republicans were in complete control of the legislature, and there was consequently no prospect that the Water Power Act would be repealed and a new policy enacted. It was evident that both parties had "dug in" for a long, hard campaign. The Republicans were presumably hoping to elect the next governor and thus remove the one barrier which prevented official action from being taken to put their policies into actual effect.

3

Both sides indulged in the practice of laying their case before the people of the state. Several debates of one kind and another were held during the past year in various communities. The subject matter of these debates and the arguments which the partisans used to gain popular support for their positions are not to be considered in a report of this kind. Suffice it to say that too often it is quite apparent that neither side had data of sufficient accuracy and completeness to convince any critically minded individual. There seems to have been a total lack of understanding by state officials and legislators of the real fundamental social and economic implications of this important problem. We heard on the one hand denunciations of "Big Business" and the throttle hold that it has on the power industry and through it on the people as a whole. On the other hand we were told in sweeping phrases as to the successes of private enterprise. The charge of "thief" was met by the charge of "socialist," and so it went. It is also true, unfortunately, that with the passing of every day the subject became more frankly the football of practical politics. Proportionately as the discussion became more frankly political it became less pertinent and enlightening.

Logically enough the problem of water power control was one of the most important issues in the 1928 campaign between Albert Ottinger and Franklin D. Roosevelt for the governorship.

Both candidates addressed themselves to this problem on several occasions during their speaking tours about the state. Mr. Roosevelt advanced to the attack in a manner almost identical to that which had been employed by Governor Smith. He accepted Smith's plan for a power authority *in toto*. He promised to urge the same power legislation that had been advocated by Governor Smith. He assailed the Republican position vigorously and unceasingly. It was apparent that Roosevelt's election would mean a continuance of Smith's attitude on the part of the executive which would mean that the water power and control commission would not approve applications for private development. Mr. Ottinger answered this attack in several of his speeches. He defended the Republican policy as set forth in the Water Power Law and as enunciated in the Sargent bills of 1927 and 1928. His election clearly would have meant that steps would be taken to put that policy into immediate effect and the water powers would be leased for private development.

The election of Governor Roosevelt was a victory for the Smith program so far as the executive office was concerned. At once the new governor proposed to the legislature that five trustees be appointed to report a definite plan to the next legislature with

respect to the St. Lawrence, this plan being subject to the following conditions: (a) That the dam, power house, and machinery should be built by the body of trustees and should remain forever in the physical possession of the trustees acting for and on behalf of the people of the State of New York; (b) the sale of this power to distributing companies under what is known as the contract method by which definite fair rates would be guaranteed to the individual consumers.

The legislature did not accept this proposal, and nothing was accomplished at the 1929 session.

In the 1930 session, the legislature accepted the governor's proposal that four trustees be appointed to report a definite plan with respect to the St. Lawrence. One amendment was made which provided that all plans of development be studied. The governor accepted this amendment and signed the bill which became a law in March, 1930. Apparently the first step toward the utilization of the St. Lawrence has been made.

4

Thus far our discussion of the present situation has been concerned largely with the boundary streams. It may be said that the emphasis throughout the report has been placed upon the problems involved in the development of those resources, because these water powers are of paramount importance. The type of development which will be applied to them will determine almost entirely the degree to which the public will benefit from the complete utilization of the natural resources in flowing water. The power developed from these streams will be in the nature of "firm power." That is, it will be available in practically uniform quantities throughout the whole year. This power, however, will have to be supplemented by power produced from other resources in order to take care of the demands at the "peak load." This supplementary power must come from power plants installed on the inland rivers or from steam plants, or both.

It will be recalled from our discsusion of the amount of the resource in flowing water in the state that there is over one million potential horsepower to be developed on the inland rivers. It will, of course, be immediately recognized that even though not so valuable as the resources of the boundary streams, yet the potential water powers of the inland rivers are of sufficient magnitude to warrant exploitation and development.

The development of these potential powers depends upon the government of the state to a large degree. This is due to the fact that the potential powers of these rivers cannot be exploited without the construction of a complicated system of storage reservoirs. Since the land which would be flooded in this process is in some instances the property of the state and constitutes a portion of the forest preserve, no private individual or corporation has the authority to undertake the development. That portion of the land to be flooded which is not part of the forest preserve can be secured only through a process of condemnation which can be legally accomplished only in the interest of public use and welfare and not for private profit. This also effectively excludes the possibility of unassisted private development of these resources and places much of the responsibility for the same squarely on the government of the state.

It will be recalled that at the present time there exists a constitutional provision that effectively prevents the flooding of any portion of the forest preserve for the purposes of power development. The first step that must be taken, therefore, is an amendment to that document which will make possible such development. The second consideration which must be definitely decided upon is the determination of the share of the state in the construction, operation of the reservoirs, dams and power houses, and the determination of the portion of the increased value of the power houses which shall accrue to the state. Practically all of the power sites upon these rivers are owned by private power corporations. These power sites in some cases will be doubled in value as a result of the construction of storage reservoirs. It is necessary to determine how much of this increased value shall be turned over to the state as a return for the construction and operation of the reservoirs. This is the key to the whole problem with reference to the development of the inland rivers. It is the subject of controversy at the present time.

5

The present policy of the state with reference to these problems can be found in the Machold Storage Law of 1915. It will be remembered that this law provided for the establishment of "River Regulating Districts" which should construct and operate the reservoirs and dams. The state was to build these structures through the agency of these "districts" and the cost of the same was to be assessed against all the property, both public and private, which was benefited thereby. This same law also sought to settle the issue which we have labelled as the key problem to the whole development; namely, the determination of the state's share in the increased earnings of the power houses on these rivers. It sought to settle this issue by providing that the state should receive "a reasonable return—upon the value of the rights and property of the state used and the services of the state rendered." The law also defined what should be considered "a reasonable return to the state upon the rights and property of the state used" by stating that this should "be construed to mean six per centum upon the value of the lands flowed." The value of the forest preserve lands which would be flowed is estimated at $10 per acre. It is evident that "a reasonable return to the state upon the rights and property used" according to the interpretation of such as placed by this law would not provide a very large revenue to the state. For instance, it was estimated that the reservoir upon the Salmon River-Adirondack project would increase the primary horsepower of the privately owned power plants to the extent of about 120,000 horsepower. This would net a material benefit to the owners of such plants to the extent of $287,000 per year as a maximum and $158,000 per year as a minimum. In this project 1,290 acres of state land, valued at $10 per acre would be used. On this basis of a total valuation of $12,900 the state would receive $774 annually as its share of the earnings of the whole project. It can easily be seen that the proportion between the return to private interests and to the state is not particularly equitable. This clause of the law which placed such an interpretation upon "the rights and property of the state used" has received widespread criticism from all sides until its sponsors have become somewhat less outspoken in their support of it.

It reached such devastating proportions that on February 28, 1927, Assemblyman Sargent felt called upon to introduce a bill in the legislature amending the provisions of this law. Mr. Sargent sought to add the following

provision to the clause which we have already quoted: "and in addition thereto [1] not less than six per centum upon an equitable proportion of the increased value of the water and riparian rights attaching to each and every power site on the stream or river so regulated, created by or resulting from the regulation of the flow of such stream or river." He also sought to amend the clause in the original draft of the Law which we have previously quoted by inserting the words "not less than" before the words "six per centum upon the value of the lands flowed." Great was the consternation in the ranks of the power industry when this bill was proposed. Hearings were held at which Mr. Machold, at that time president of the Northeastern power group, was present with counsel to vigorously oppose Mr. Sargent's proposal. The bill was not passed, but the feeling spread among many legislators that the present law is not correct in this regard and that some provision for a more material return to the state must be inserted in the law. Whether this measure of material return shall be the six per centum of the "equitable proportion of the increase in value" proposed by Mr. Sargent or whether it should be more or less is the key problem to the whole situation.

In the 1928 session of the legislature Mr. Sargent introduced two more bills which were concerned with the problems of water power development on the inland rivers. The first one provided for a commission to recommend legislation to insure a reasonable rate of return to the state. It was passed by the legislature, but was vetoed by Governor Smith on the grounds that no new commission was necessary. He held that the water power and control commission had the authority and the ability to make such a study and to report to the legislature.

The second bill sought to amend the Conservation Law to safeguard the interests of several prominent cities and villages situated in the Adirondack Mountains. The citizens of these localities had been aroused for some time by the fear that the development of storage reservoirs close to the city limits would imperil the safety of the inhabitants as well as being a material drawback to municipal development. This bill as presented by Mr. Sargent constituted in substance the agreement which had been effected between the civic leaders of these localities and the officers of the power companies interested in storage possibilities. The bill passed the legislature, but Governor Smith vetoed it on the grounds that making an exception in the case of the few cities which would be affected by this law carried with it the tacit assumption that there would be no limitation upon power developments in other sections of the Adirondack region. It seems quite possible that he felt that should he attach his signature to this bill it would be considered to mean that he would approve power developments elsewhere. At all events he refused to sign the bill and it did not become law.

Hence the 1928 session of the legislature produced no changes whatever in the situation on the inland rivers.

Nothing of any consequence was done in 1929 toward the development of inland rivers or boundary streams because of the continuing disagreement between the executive and legislative branches of the state government. The issue remains and presents itself in practically the same form in 1930. This enforced delay may allow sufficient time for a thorough expert investigation of the fundamentals of both plans. There is obvious need for an authentic, expert, unbiassed report which will deal frankly and honestly with the whole situation with special emphasis upon public welfare.

[1] That is in addition to a six per centum return on the value of the state lands flowed.

CHAPTER VII

THE WATER POWER SITUATION IN OTHER STATES

In practically no other state in this country has the problem of power development reached the political proportions that it has in New York. As was mentioned in the introductory statement, several states possess important water power resources within their borders. But an examination of the statutes of these states indicates that only Arkansas, Pennsylvania, West Virginia and Wisconsin have enacted legislation designed to set up specific principles for water power development.[1]

Most of the forty-eight states have provided themselves with public utility commissions designed to regulate utility enterprises insofar as rates, service, and financing are concerned. Five states (Arkansas, New Hampshire, Vermont, West Virginia and Wisconsin) place the direct responsibility for regulation of water power development upon their utility commissions. Most of them regulate the creation of corporations in one way or another. Practically all of them have provided for at least some measure of conservation of natural resources of which flowing water must be considered an important type. Others rely upon the common law together with direct legislative action for specific projects. In short the problem of the development of water resources can be said to be indirectly considered in various ways in nearly every state.

However, these attempts at control are not comparable in purpose, scope, or effect with the enunciation of a definite, specific policy with regard to the development of water resources for purposes of power generation. The lack of specific water power legislation in these many states is due in most cases to the absence of large resources suitable for power purposes. In other states it is clearly due to the fact that the use of water for irrigation purposes is of fundamental concern and power generation is reckoned to be of minor importance. Again in some cases the problem is recognized, but attempts to develop a principle and secure its enactment into law have failed.

Indeed it must also be admitted that New York's two largest resources, the Niagara and the St. Lawrence, are of such outstanding importance because of the immense amount of potential power involved that the popular imagination and concern would naturally be stimulated and aroused more fully in this state than in the others. All other resources of a magnitude comparable to these fall under federal or interstate jurisdiction. The water resources of the other states are more comparable to the inland river water powers of New York and hence have not stirred such popular and political interest. At all events it is true that the New York situation is in many ways unique.

[1] The West Virginia law seems to have become a dead letter. Its intent was obviously to discourage rather than encourage power development.

2

Wisconsin comes nearer to having a definitely established water power policy than any state other than New

York.[1] This policy was not enacted into law at any one moment but represents the results of years of experiment and in a sense is an accumulation from that experience. The administration of this policy is vested in the hands of the Railroad Commission of Wisconsin, the authority of which is not adequately indicated by its title. This commission is charged with the administration of the public utility law and other acts dealing with the regulation of quasi-public corporations. That is to say, it is the public utilities commission of the state and since it is also responsible for the administration of the water power law, it may be said to exercise both types of public regulation mentioned in the introductory statement.

Since the state of Wisconsin itself owns practically no water powers in the manner that the State of New York may be said to own the St. Lawrence and Niagara resources, its problem is mainly one of regulation of private power developments in the interests of general public safety and welfare. Dams must not be built in such manner as to create a flood menace. They must not be built so as to block navigation or the floating of logs. Sound engineering practice must govern their construction. To secure these things therefore the Railroad Commission is given the authority to issue or deny permits for the construction of dams. Application must be made for such permits in a detailed fashion and complete data as to length of dam, area of land to be flowed, ownership of such land, devices to insure uninterrupted navigation and flowing of logs, etc. must be furnished. Likewise permits must be secured from the commission before hydro-electric power can be generated at the various power sites. In each case hearings are held at which all the interested parties are allowed to present their claims. Should the permits be issued the details of the construction are incorporated and the construction or operating companies must follow the conditions of the permit or be liable in the Wisconsin courts. The permits likewise include an evaluation of the dam site and the lands to be flowed.

During the progress of the construction the commission is required by law to maintain periodic inspection of the work and continuous auditing of the accounts to the end that the construction may be sound and the financing accurate. The latter feature enables the commission to arrive at a true valuation of the project when completed.

Each permit also contains a recapture clause. This clause reserves to the state the right to take over the project at the expiration of a thirty-year period upon the payment of the cost of reconstruction of the project works in "their then existing condition," as determined by the commission, plus the value of the dam site and the flowage rights as determined at the time of the issuance of the permit. The permit itself is not to be valued.

These are the more fundamental provisions of the Wisconsin Water Power Law. In some respects the basic policy is similar to that laid down in New York with regard to the inland waters. It differs in one very important respect. The New York law, it is to be remembered, provides for construction of the storage reservoirs by a quasi-public agency. The Wisconsin policy relies upon private development both as to the regulation of stream flow through storage and the development of hydro-electric power. Quite obviously the fact that the ownership of power sites is vested in private individuals and corporations alters the situation in Wisconsin and makes for an emphasis upon regulation and inspection as methods of conserving the public interest. The recapture clause is probably the most significant part of the law.

[1] See Wisconsin Statutes, 1915, Chapter 31.

3

In the State of Pennsylvania water as a source of electric power will always be in a position of secondary importance to coal. Pennsylvania's water power resources are not large nor in themselves particularly important. Despite this fact and largely in order to round out a constructive policy of conservation, this state has enacted specific legislation incorporating a water power policy into statute law. The administration of the act is largely in the hands of the Water and Power Resources Board of the Department of Forests and Waters.

The Pennsylvania statutes provide in a general way for developments of two kinds. The one includes the impounding of waters for power purposes upon lands owned by the state. The other includes projects on lands and waters privately owned. In 1923 the legislature passed a law authorizing the Department of Forests and Waters, with the approval of the Governor and Attorney-General, to lease portions of the state forests for periods of not more than fifty years for various project works connected with the process of impounding waters either for use in steam generation of power or in the generation of hydro-electric power.[1]

The conditions and provisions of the lease are to be determined by the department with the approval of the Governor and Attorney-General. The Commonwealth reserves the privilege of renewing or extending the lease after the expiration of the fifty-year period or of taking over the project works for itself or another prospective lessee. This recapture by the state for itself or another lessee may be brought about upon payment of "the actual net investment" in the complete project. In effect this law allows a procedure which is prohibited by the Constitution of New York State, *i.e.*, use of public lands for developmental purposes.[2]

In the same year the Pennsylvania legislature passed two other measures designed to establish the procedure to be followed in the other types of development.[3] By this legislation the commission is empowered to grant a permit to construct a power dam or to change a stream to develop power which shall be limited to a maximum term of fifty years. The permittee however is declared to be entitled to an extension and renewal of the permit until he shall have received re-payment by the Commonwealth or prospective permittee of the actual capital prudently invested in the project together with damages to any property not recaptured which is affected by the recapture.

Every permit must contain a condition to the effect that if the project is within the jurisdiction of the Federal Power Commission the permittee must secure a license from that body by a certain date under penalty of forfeiture of his permit. Each permit is subject to an annual charge to be specified in the permit with which the Commonwealth will be reimbursed for the costs of administering the power laws.[4]

[1] Act of Pennsylvania General Assembly, No. 250, 1923.

[2] See p. 33, this report.

[3] Acts of Pennsylvania General Assembly, Nos. 293, 294, 1923.

[4] This annual charge has been fixed to include the following:

(a) An annual pre-operation charge of two cents per horsepower capacity.

(b) An annual operation charge of five cents

The computation of horsepower capacity upon which these charges are based may be revised from time to time. Other conditions and provisions may be inserted in the permit by the commission as it shall deem advisable. Failure to follow these conditions constitutes a basis for revocation of the permit.

The second law grants to any public service company holding a permit the right to appropriate and condemn any property "which the commission shall find to be necessary" for the successful construction of the project works.[1] The permittee in this case, however, must reconstruct at his own expense all structures which must be moved. This reconstruction is to be supervised in large part by the Commission.

Thus has Pennsylvania determined its policy with reference to water power development. There have been practically no leases of state forest land under the provisions of the first law described. One or two leases have been made for rights of way for transmission lines, but no complete power projects. Under the provisions of the law establishing the procedure of the granting of permits some action has been taken.

4

The State of Maine harbors within its boundaries a considerable amount of water power. Yet there is no settled policy in that state. Several attempts have been made to secure specific legislation. Various commissions have been appointed, have existed for a time, and then disappeared. The net result seems to have been confined simply to a more accurate census of the potential water powers.

The state owns no power resources itself. In addition the private rights over the water resources is most rigidly protected by legislation and by judicial interpretation of the constitutional provisions. The Maine constitution provides that private property may be taken only for "public use" and the courts have held that the development of storage reservoirs does not come within this category. Since the development of Maine power depends upon the development of storage reservoirs to a great extent, it would seem as though the constitution would have to be amended to include power development as part of public use.

In 1919 the Maine Water Power Commission was created with the formulation of comprehensive plans for storage as one of its main purposes. It was not successful due to a considerable extent to the constitutional limitation upon "public use." It was abolished in 1923.

At the present time, the responsibility of collecting water power data has devolved upon the Public Utilities Commission. Thus the problem in Maine is centered upon the need for constitutional revision and the chief controversy seems to be over the law which forbids exportation of power. Maine illustrates the necessity for a definite power policy.

5

Nebraska has recently made an attempt to enact a policy with regard to power development. In the 1927 session of the legislature a bill was introduced which provided for the creation of utility districts. This bill passed the Senate but was defeated in the House.

This bill was designed to create one such utility district. This district was

per horsepower of installed capacity for the first year; ten cents for the second; and for the third and succeeding years a charge of twenty-five cents.

[1] This includes highways, streets, railways, bridges, etc. as well as lands and waters.

to be a body corporate, "with the usual powers of a corporation for public purposes" together with power to "appropriate public waters, impound same, to acquire, construct, operate and maintain electric generating plants, transmission lines, and to construct and maintain . . . all other improvements or machinery incident to power and water projects." It was to be empowered "to sell to private consumers, or public agencies electric energy, water, and water rights." The administration of the law in this district was to devolve upon a board of directors of five to be elected by popular vote in the district.

The board was empowered to secure bids and enter into contracts with successful bidders for all work to be done in the district. The board was to devise a comprehensive plan for all developments within the district. This should indicate estimated income from the developments and the estimated cost of constructing and operating the same. These plans and estimates were to be submitted to the Department of Public Works for examination.

Before any contracts for work were to be let, the law provided that the board should obtain written contracts from municipalities, public agencies, or private corporations for the purchase of electric energy, and from land owners for the purchase of water for purposes of irrigation. The rate of sale of the above was to be sufficient to pay at least 6 per cent of the estimated cost of the various projects. After these contracts should have been secured, the board was empowered to issue bonds on the credit of the district in order to secure the sums necessary for the development of the plan. It is obvious that this policy would have been similar in many respects to that adopted in New York for the development of the inland rivers.

APPENDIX A[1]

WATER POWER RESOURCES IN NEW YORK STATE[2]

River System	*Developed Power in H.P.*	*Potential Power in H.P.*	*Total Power in H.P.*
Allegheny	2,300	2,500	4,800
Ausable	6,140	25,140	31,280
Black	98,630	148,275	246,905
Chateaugay	5,500	12,500	18,000
Delaware	3,400	52,700	56,100
Genesee	26,740	71,540	98,280
Grass	3,185	27,355	30,540
Hudson	201,540	343,960	545,500
Lake Champlain	17,000	4,000	21,000
Lake Erie	4,500	3,700	8,200
Lake Ontario	18,000	24,000	42,000
Mohawk	78,000	66,000	144,000
Niagara (20,000 C. F. S.)	300,000	300,000	600,000
Oswegatchie	24,738	58,098	82,836
Oswego	58,600	67,300	125,900
Raquette	30,540	139,260	169,800
St. Lawrence	96,000	904,000	1,000,000
St. Regis	4,187	63,386	67,573
Salmon (Franklin County)	5,000	11,000	16,000
Salmon (Oswego County)	15,245	25,000	40,245
Saranac	17,973	32,980	50,953
Susquehanna	14,800	10,000	24,800
Totals	1,032,018	2,392,694	3,424,712

[1] Prepared by the State Engineer at the request of the Water Power Commission, 1922.
[2] There is 55,000 horsepower available in potential water power from the Barge Canal surplus waters. This is included above in the various river systems.

APPENDIX B

POTENTIAL WATER-POWER RESOURCES OF THE UNITED STATES, 1924[1]

Division and state	*Available 90% of the time*		*Available 50% of the time*	
	Horsepower	*Per cent*	*Horsepower*	*Per cent*
United States	34,818,000	100.00	55,030,000	100.00
New England	998,000	2.87	1,978,000	3.60
Middle Atlantic	4,317,000	12.40	5,688,000	10.35
East North Central	737,000	2.12	1,391,000	2.53
West North Central	871,000	2.50	1,844,000	3.35
South Atlantic	2,476,000	7.11	4,464,000	8.11
East South Central	1,011,000	2.90	2,004,000	3.64
West South Central	434,000	1.25	888,000	1.61
Mountain	10,736,000	30.83	15,513,000	28.19
Pacific	13,238,000	38.02	21,260,000	38.63
New England:				
Maine	536,000	1.54	1,074,000	1.95
New Hampshire	186,000	.53	350,000	.64
Vermont	80,000	.23	169,000	.31
Massachusetts	106,000	.31	235,000	.43
Rhode Island	25,000	.07	40,000	.07
Connecticut	65,000	.19	110,000	.20
Middle Atlantic:				
New York	4,010,000	11.52	4,960,000	9.03
New Jersey	50,000	.14	90,000	.16
Pennsylvania	257,000	.74	638,000	1.16
East North Central:				
Ohio	55,000	.16	166,000	.30
Indiana	40,000	.12	110,000	.20
Illinois	189,000	.54	361,000	.66
Michigan	168,000	.48	274,000	.50
Wisconsin	285,000	.82	480,000	.87
West North Central:				
Minnesota	203,000	.58	401,000	.73
Iowa	169,000	.49	395,000	.72
Missouri	67,000	.19	152,000	.27
North Dakota	82,000	.23	193,000	.35
South Dakota	63,000	.18	110,000	.20
Nebraska	183,000	.53	342,000	.62
Kansas	104,000	.30	251,000	.46
South Atlantic:				
Delaware	5,000	.01	10,000	.02
Maryland and District of Columbia	106,000	.30	238,000	.43
Virginia	495,000	1.32	812,000	1.48
West Virginia	355,000	1.02	980,000	1.78
North Carolina	540,000	1.55	816,000	1.48
South Carolina	429,000	1.23	632,000	.15
Georgia	572,000	1.65	958,000	1.74
Florida	10,000	.03	18,000	.03

[1] U. S. Department of the Interior, U. S. Geological Survey; *Water Supply Paper*, No. 579, 1928.

POTENTIAL WATER-POWER RESOURCES OF THE UNITED STATES, 1924 (*Continued*)

Division and state	*Available 90% of the time*		*Available 50% of the time*	
	Horsepower	*Per cent*	*Horsepower*	*Per cent*
East South Central:				
Kentucky	77,000	.22	184,000	.33
Tennessee	432,000	1.24	710,000	1.29
Alabama	472,000	1.35	1,050,000	1.91
Mississippi	30,000	.09	60,000	.11
West South Central:				
Arkansas	125,000	.36	178,000	.32
Louisiana	1,000	.00	2,000	.00
Oklahoma	70,000	.20	194,000	.35
Texas	238,000	.69	514,000	.94
Mountain:				
Montana	2,550,000	7.32	3,700,000	6.72
Idaho	2,122,000	6.10	4,032,000	7.33
Wyoming	704,000	2.02	1,182,000	2.15
Colorado	765,000	2.20	1,570,000	2.85
New Mexico	116,000	.33	186,000	.34
Arizona	2,759,000	7.92	2,887,000	5.25
Utah	1,420,000	4.08	1,586,000	2.88
Nevada	300,000	.86	370,000	.67
Pacific:				
Washington	4,970,000	14.27	7,871,000	14.30
Oregon	3,665,000	10.53	6,715,000	12.20
California	4,603,000	13.22	6,674,000	12.13
Alaska	1,000,000	....	2,500,000	....
Hawaii	100,000	....	200,000	....
Porto Rico	19,000	....	28,000	....

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(2) *Reports of State Water Commission*, Chap. 586, Statutes of 1913. Biennial Reports, 1916–1920.

(3) *Reports of Division of Water Rights*, Chapters 602–607, Statutes of 1921. Biennial Reports, 1922–1924.

(4) *Bulletins of Division of Water Rights*, Nos. 1–5, 1923–1926.

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